# DOCUMENT RESUME

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|---|---|
| ED 250 179 | SE 045 155 |
| TITLE | Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources Materials, Supplement XVIII. |
| INSTITUTION | Ohio State Univ., Columbus, Ohio. Information Reference Center for Science, Mathematics, and Environmental Education. |
| SPONS AGENCY | Environmental Protection Agency, Washington, D.C. Office of Water Programs. |
| PUB DATE | Jul 84 |
| GRANT | EPA-T-901366010 |
| NOTE | 216p.; For Supplement XVII, see ED 247 111. |
| AVAILABLE FROM | EPA Instructional Resources Center, 1200 Chambers Rd., 3rd Floor, Columbus, OH 43212 (subscription, $12.00, $4.00 ea.). |
| PUB TYPE | Reference Materials - Bibliographies (131) |
| EDRS PRICE | MF01/PC09 Plus Postage. |
| DESCRIPTORS | *Audiovisual Aids; Citizen Participation; Environmental Education; Hazardous Materials; Indexes; Information Dissemination; *Instructional Materials; Pesticides; Postsecondary Education; Sludge; Technology; Waste Disposal; *Waste Water; Water; Water Pollution; *Water Quality; *Water Resources; *Water Treatment |

ABSTRACT

Compiled are abstracts and indexes to selected print and non-print materials related to wastewater treatment and water quality education and instruction, as well as materials related to pesticides, hazardous wastes, and public participation. Sources of abstracted/indexed materials include all levels of government, private concerns, and educational institutions. Title, author(s), publication date, cross-references, descriptors, and availability are provided for each entry. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements of their programs. This publication supplements and does not replace "Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources" or IRIS Supplements I-XVII. (JN)

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Water

# Water Quality Instructional Resources Information System

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NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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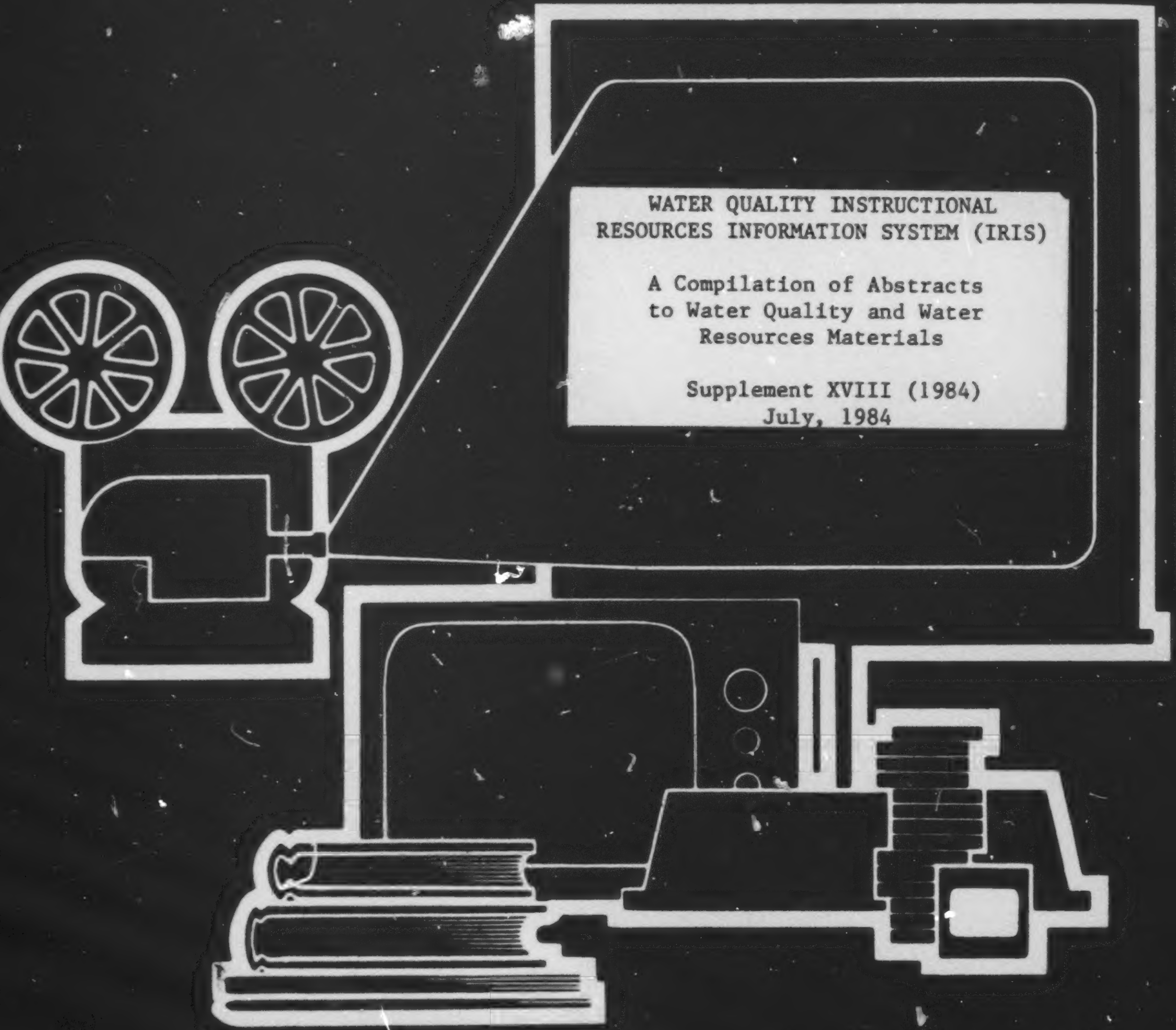

WATER QUALITY INSTRUCTIONAL
RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts
to Water Quality and Water
Resources Materials

Supplement XVIII (1984)
July, 1984

Prepared by

EPA Instructional Resources Center
SMEAC Information Reference Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

as part of
Grant No. T-901366010

WATER QUALITY INSTRUCTIONAL
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# Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition, some materials related to pesticides, hazardous wastes, and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

(614) 422-6717

## I. General Information about Materials in IRIS.

### A. What types of materials are included in IRIS?

The EPA Instructional Resources Center (water) acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In a few cases the EPA Instructional Resources Center is the source of the materials.

### B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the materials is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this compilation, and also by computer.

When items are processed they are entered on the IRIS (water) computer tape. This tape is maintained by the EPA Instructional Resources Center at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

### C. How can a user locate materials in IRIS?

1. All materials placed in IRIS (water) collection.

   Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of this compilation and similar ones to follow and (2) by computer.

   The first compilation contained resumes of selected materials processed for the previous IRIS (water) collection and resumes of selected materials of items added to the IRIS (water) collection. Copies are available for purchase from the EPA Instructional Resources Center for $5.00

Quarterly updates of the compilation are available by subscription on a yearly basis beginning November, 1979. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EPA Instructional Resources Center. A subscription to the quarterly supplements for 1984 is $12.00 (within the U.S.). Price to Canada and Mexico is $14.00. Prices in other Countries is $18.00. Separate quarterly supplements are $4.00 each.

The compilation and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched by both batch and on-line computer searches. The IRIS tapes are available for searching through CompuServe. Individuals or agencies with computer terminals and telephone connection equipment can subscribe to CompuServe and do their own searches if they desire.

Information regarding Dialog may be obtained by writing or phoning Dialog Information Retrieval Service, 3460 Hillview Avenue, Palo Alto, CA 94304, (415) 858-3775.

Information regarding CompuServe can be obtained from the EPA/IRC.

2. Materials placed in the Educational Resources Information System (ERIC)

A number of the materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not, contact the EPA Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but users can access them through Dialog, BRS, CompuServe and Systems Development Corporation (Orbit). For the addresses of search services in your state that can search these databases, contact the:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Most of the materials announced in RIE are available on microfiche (microfilm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EPA Instructional Resources Center for $0.06 per page plus $1.00 per document.

For information about locations of ERIC microfiche sites in your state, contact the EPA Instructional Resources Center.

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press
2214 North Central at Encanto
Phoenix, Arizona 85004
(602) 254-6156

Many libraries subscribe to CIJE. Materials announced in CIJE can be searched manually each month by scanning CIJE or by checking the index terms in the back of each issue. Materials announced in CIJE can be searched by computer also. Refer to the previous discussion of RIE concerning computer searches.

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. Current prices are $12.00 per article. Additional copies of the same article are $2.25 each. For further information write to:

UMI Article Reprint Department
300 North Zeeb Road
Ann Arbor, Michigan 48106
(800) 521-0600

## II. How to Use the Compilation

### A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered into ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

1. Sample resume of materials not entered in ERIC

a. IRIS NUMBER: EW006023
b. PUBLICATION DATE: FEB 81
c. TITLE: PROGRAMMED APPROACH TO WATER/MASS ANALYSES.
d. PERSONAL AUTHOR: SPENCE, GEORGE R., JR.
e. DESCRIPTOR: *DESIGN; *ENGINEERING; *EQUIPMENT; *MASS BALANCE; *PROJECT DESIGN; *POLLUTION ENGINEERING; *PIPES; *WATER RESOURCES

f. DESCRIPTIVE NOTE: 30-33P.
g. ABSTRACT: DURING THE ENGINEERING PHASE OF A PROJECT DESIGN, WATER REQUIREMENTS OFTEN CHANGE AS NEW INFORMATION BECOMES AVAILABLE. THIS ARTICLE DETAILS A PROGRAMMED APPROACH TO CALCULATION OF A WATER/MASS BALANCE WHICH PROVIDES THE USER WITH THE ABILITY TO READILY ASSESS THE IMPACT OF VARYING WATER QUALITIES, FLOW PATTERNS, AND FLOW RATES. THIS INFORMATION IS THEN USED IN DETERMINING PIPE AND EQUIPMENT SIZES.

h. AVAILABILITY: POLLUTION ENGINEERING; V13 N2

a. IRIS NUMBER — this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.

b. PUBLICATION DATE -- date material was published according to information on the material.

c. TITLE

d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.

e. DESCRIPTOR -- subject terms which characterize substantive contents and form of the materials. The major terms are preceeded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.

f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed. The price of the material quoted is the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.

g. ABSTRACT -- some early materials entered into IRIS did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.

h. AVAILABILITY -- information in this field indicates where the material can be obtained.

2. Sample resume of material entered into ERIC (Resources in Education)

Items entered into ERIC (Resources in Education) will have a few additional data fields.

IRIS ACCESSION NUMBER: EW006664
PUBLICATION DATE: 80
TITLE: RESOURCE DEVELOPMENT OF WATERSHED LANDS: A SIX WEEK SHORT COURSE.
DESCRIPTOR: ADMINISTRATION; ECOLOGICAL FACTORS; ECONOMIC FACTORS; INSTRUCTIONAL MATERIALS; *LAND USE; NATURAL RESOURCES; *POST SECONDARY EDUCATION; *TECHNICAL EDUCATION; *WATER RESOURCES; HYDROLOGY; NATURAL RESOURCES MANAGEMENT; WATER QUALITY; *WATERSHEDS

b. DESCRIPTIVE NOTE: EDRS PRICE: MF01 PLUS POSTAGE-NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT.

ABSTRACT: THIS COURSE WAS DESIGNED TO PROVIDE THE WATER RESOURCE TECHNICIAN OR MANAGER WITH INFORMATION WHICH WILL AID IN THE IMPLEMENTATION OF IMPROVEMENTS OF PRESENT LAND USE PRACTICES AND TO ILLUSTRATE ALTERNATIVE CONCEPTS AND TECHNIQUES IN LAND AND WATER USE FOR INCREASING AND IMPROVING THE MULTIPLE PRODUCTS OF
a. WATERSHED LANDS. (ED 197 941)

AVAILABILITY: ERIC DOCUMENT REPRODUCTION SERVICE, P. O. BOX 190, ARLINGTON, VA 22210

a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can be obtained by contacting:

ERIC Document Reproduction Service (EDRS)
P. O. Box 190
Arlington, Virginia 22210
(703) 841-1212

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EPA Instructional Resources Center.

## B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index or Author Index.

### 1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to Laboratory Techniques and to Wastewater Treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence, they are not listed in this index.

## III. Correcting an Existing IRIS Record

The IRIS data base will be updated on a quarterly basis. Corrections will be made to the data base at those times. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EPA Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the sources to verify whether the materials are available, but your assistance will provide corrections between annual availability checks.

If you are the supplier of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

## IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the IRC Bulletin. The Bulletin is issued about six times a year as information is available.

If you are not on the mailing list write to the EPA Instructional Resources Center. Limited numbers of some back issues are still available.

If you need information about IRIS you can also phone (614) 422-6717 with your questions.

## V. Requests for Assistance in Using IRIS

### A. Assistance in use of IRIS manuals

If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EPA Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

### B. Assistance in accessing IRIS by computer

1. Conducting searches.

   See section VII.

2. Subscribing to CompuServe for computer searching of IRIS.

   Contact: CompuServe
   5000 Arlington Centre Boulevard
   P.O. Box 20212
   Columbus, OH 43220
   (614) 457-8600

3. Contacting a computer search service (an agency that will conduct a search for you, usually for a fee.)

   The EPA Instructional Resources Center maintains a list of agencies that can conduct searches. Most charge a fee, though some are free to qualified users in a limited geographical area.

   Phone or write to obtain information for your area.

## VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EPA Instructional Resources Center is developing some user service products in selected areas.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

A. ERIC Clearinghouse on Adult, Career, and Vocational Education
The Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services
University of Michigan
School of Education, Room 2108
Ann Arbor, Michigan 48109
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings, theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary and Early Childhood Education
University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management
University of Oregon
Library, Room 108
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

E. ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

F. ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, NW, Suite 630
Washington, DC 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

G. ERIC Clearinghouse on Information Resources
Syracuse University
School of Education
Huntington Hall
150 Marshall Street
Syracuse, New York 13210
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

H. **ERIC Clearinghouse for Junior Colleges**
University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

I. **ERIC Clearinghouse on Languages and Linguistics**
Center for Applied Linguistics
3520 Prospect Street, NW
Washington, DC 20007
Telephone: (202) 298-9292

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English and speakers of other languages.

J. **ERIC Clearinghouse on Reading and Communication Skills**
National Council of Teacher of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

K. ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

L. ERIC Clearinghouse for Science, Mathematics and Environmental Education
The Ohio State University
1200 Chambers Road - Room 310
Columbus, Ohio 43212
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

M. ERIC Clearinghouse for Social Studies/Social Science Education
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 492-8434

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

N. ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, NW, Suite 610
Washington, DC 20036
Telephone: (202) 293-2450

School personnel at all levels, all issues from selection through preservice and inservice preparation and training to retirement; curricula, educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

O. ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service (ETS)
Rosedale Road
Princeton, New Jersey 08541
Telephone: (609) 734-5176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects of programs.

P. ERIC Clearinghouse on Urban Education
Teachers College, Columbia University
Institute for Urban and Minority Education
Box 40
525 West 120th Street
New York, New York 10027
Telephone: (212) 678-3433

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences), education of urban, Puerto Rican and Asian American populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics, structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Q. Educational Resources Information Center
Central ERIC
National Institute of Education (NIE)
Information Resources Division
1200 - 19th Street, NW
Washington, DC 20208
Telephone: (202) 254-5500

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

## VII. How to Structure a Computer Search of IRIS

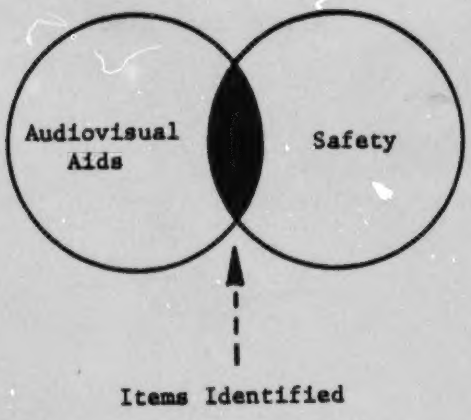
This explanation relates to the IRIS data base that can be searched through CompuServe.

A few notes about the service are important. The following fields are searchable by computer: (1) Authors, (2) Title, and ([illegible]) Subject index terms.

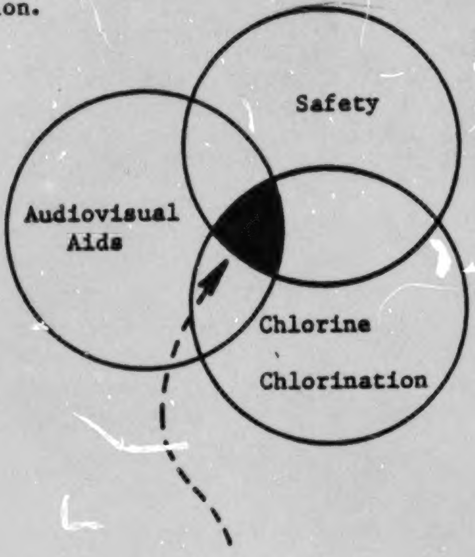
If you submit a search of IRIS through CompuServe, the program can search for the words you select in three fields. These fields are: (1) title field, (2) subject index field, and (3) author field. Several sample searches are listed below and on the following pages.

### A. Sample 1

If you want to locate audiovisual aids that relate to safety you would submit a search with audiovisual aids and safety. Materials that included the terms both audiovisual aids and safety in the subject index field would be identified by computer.



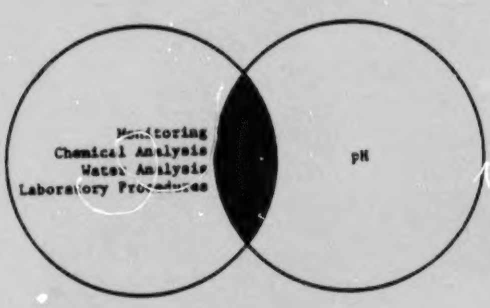
The computer program can tell you the number of items and the title of the items. If you were primarily interested in audiovisual aids, safety, and chlorine you would submit a search of these three terms. You might want to include chlorides and chlorination as well as chlorine in the search. This search would identify materials that contained audiovisual aids, safety, and one or more of the words, chlorine and chlorination.


Safety
Audiovisual Aids
Chlorine
Chlorination

Items Identified

B. Sample 2

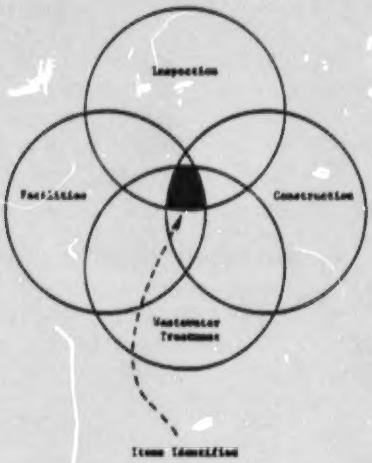
If you want to identify materials related to monitoring, you should include several related terms and the chemical, material, or situation that is being monitored. See the example below.


Monitoring
Chemical Analysis
Water Analysis
Laboratory Procedures
pH

This search would identify all the items that included any of the terms on the left and pH.

### C. Sample 3

If you are interested in materials related to inspection and construction you could conduct a search of these two terms. The search would identify all materials that included both terms. If you were interested in only wastewater treatment facilities you could construct a search as diagrammed.



This search would yield specific materials and demonstrates how a computer search can help you locate materials you want.

The subject index in the IRIS compilations can also be used to help you select words to include in a search. Words listed in the subject index are certain to be in the subject field. Therefore, selecting these terms to use in structuring a search will increase the probability of locating materials.

## VIII. How to Order Materials

The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.

A. A number of audiovisual materials can be obtained on a rental basis or purchased from the EPA Instructional Resources Center. Most items previously available from the NTOTC office are available from the EPA Instructional Resources Center at The Ohio State University. For further information write or call.

B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service
P. O. Box 190
Arlington, Virginia 22210
(703) 841-1212

C. The EPA Instructional Resources Center will provide Xerox copies of materials that are not copyrighted for $1.00 per document plus $0.06 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EPA Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

# RESUME SECTION

IRIS ACCESSION NUMBER: EW010709

PUBLICATION DATE: JUL 83

TITLE: EXTRACTION OF PESTICIDES FROM PROCESS STREAMS USING HIGH VOLATILE SOLVENTS: A FEASIBILITY STUDY.

PERSONAL AUTHOR: REYNOLDS, S. L.

DESCRIPTOR: *COSTS; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PESTICIDES; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SOLVENT EXTRACTION; *WASTE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PRICE CODE: PB83-209767

ABSTRACT: THE OBJECTIVE OF THIS RESEARCH PROGRAM WAS TO DETERMINE THE FEASIBILITY OF EXTRACTING PESTICIDES FROM PROCESS STREAMS USING A LIQUID-LIQUID SOLVENT EXTRACTION APPROACH. RESULTS OF THE STUDY ARE REPORTED. COSTS OF THE TECHNOLOGY COMPARES FAVORABLY WITH THE CARBON ADSORPTION ALTERNATIVE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010748

PUBLICATION DATE: 84

TITLE: STATUS AND SIGNIFICANCE OF CREDENTIALING.

PERSONAL AUTHOR: MUSGRAVE, DOROTHEA

DESCRIPTOR: *CRITERION REFERENCED TESTS; *CREDENTIALS; *CERTIFICATION; *CURRICULUM DEVELOPMENT; CURRICULUM GUIDES; CURRICULUM EVALUATION; LEARNING MODULES; *MATERIAL DEVELOPMENT; *MINIMUM COMPETENCIES; OCCUPATIONAL SAFETY AND HEALTH; POSTSECONDARY EDUCATION; *PROGRAM DEVELOPMENT; TOXICOLOGY; TEST CONSTRUCTION; *ENVIRONMENTAL HEALTH

DESCRIPTIVE NOTE: 183-186P.

ABSTRACT: DISCUSSES THE CURRENT STATUS, SIGNIFICANCE, AND FUTURE OF CREDENTIALING IN THE FIELD OF ENVIRONMENTAL HEALTH. ALSO DISCUSSES FOUR PHASES OF A BUREAU OF HEALTH PROFESSIONS (BHP) CREDENTIALING PROGRAM, AND BHP-FUNDED PROJECTS RELATED TO THEIR DEVELOPMENT AND IMPLEMENTATION. PHASES INCLUDE ROLE DELINEATION, RESOURCES DEVELOPMENT, EXAMINATION DEVELOPMENT, AND EXAMINATION ADMINISTRATION.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V46 N4

IRIS ACCESSION NUMBER: EW010824

PUBLICATION DATE: JAN 84

TITLE: ACTIVATED SLUDGE TREATMENT. 1982-JANUARY 1984 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ACTIVATED SLUDGE TREATMENT; *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *DOMESTIC WASTES; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 59P. PRICE CODE: PC N01/MF N01; PB84-857795

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE ACTIVATED SLUDGE PROCESS IN TREATING INDUSTRIAL AND DOMESTIC WASTE. INCLUDED ARE CITATIONS DEALING WITH APPARATUS DESIGN, PARAMETERS FOR EFFECTIVENESS, AND ORGANISMS UTILIZED IN THE VARIOUS PROCESSES. PERFORMANCE EVALUATIONS AND APPLICATIONS OF THE VARIOUS PROCESSES FOR THE PURIFICATION AND REMOVAL OF UNWANTED SUBSTANCES FROM SEWAGE AND WASTE WATER ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 71 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010848

PUBLICATION DATE: NOV 83

TITLE: RAPID ASSESSMENT OF POTENTIAL GROUND-WATER CONTAMINATION UNDER EMERGENCY RESPONSE CONDITIONS.

PERSONAL AUTHOR: DONIGIAN, A. S., JR.; AND OTHERS

DESCRIPTOR: *ASSESSMENT METHODOLOGY; *CONTAMINATION; *GROUNDWATER; *CHEMICAL SPILLS; *EMERGENCY RESPONSES; *HAZARDOUS WASTES; *MANUALS; *WATER QUALITY

DESCRIPTIVE NOTE: 159P. PRICE CODE: PC A08/MF A01; PB84-133123

ABSTRACT: EMERGENCY RESPONSE ACTIONS AT CHEMICAL SPILLS AND ABANDONED HAZARDOUS WASTE SITES OFTEN REQUIRE RAPID ASSESSMENT OF THE POTENTIAL FOR GROUNDWATER CONTAMINATION BY THE CHEMICAL OR WASTE COMPOUND. THIS MANUAL PROVIDES A RAPID ASSESSMENT METHODOLOGY FOR PERFORMING SUCH AN EVALUATION WITHIN A 24-HOUR EMERGENCY RESPONSE TIME FRAME SO THAT EMERGENCY ACTIONS CAN BE TAKEN. THE METHODOLOGY CONSISTS OF A DECISION FLOWCHART, GRAPHICAL TRAVEL TIMES THROUGH SOILS AND GROUNDWATER, AND GUIDELINES FOR ESTIMATING REQUIRED PARAMETERS REPRESENTING CRITICAL CONTAMINANT AND SITE CHARACTERISTICS. IN ADDITION TO THE COMPONENTS OF THE METHODOLOGY, THIS MANUAL DISCUSSES CRITICAL COMPOUND AND SITE CHARACTERISTICS, DESCRIBES ASSUMPTIONS AND LIMITATIONS OF THE PROCEDURES, PROVIDES AUXILIARY SOURCES OF INFORMATION (TO SUPPLEMENT THIS MANUAL) AND PRESENTS EXAMPLE APPLICATIONS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010849

PUBLICATION DATE: NOV 83

TITLE: RECOVERY, REUSE, AND RECYCLE OF INDUSTRIAL WASTE.

PERSONAL AUTHOR: NOLL, K. E.; AND OTHERS

DESCRIPTOR: *HAZARDOUS WASTES; *INDUSTRIAL WASTES; *RECOVERY; *REUSE; *RECYLING; *TECHNOLOGY; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 217P. PRICE CODE: PC A10/MF A01; PB84-127141

ABSTRACT: THE MAJOR GOAL OF THIS WORK IS TO PRODUCE A DOCUMENT USEFUL IN PLANNING EFFORTS AIMED AT ELIMINATION OF INDUSTRIAL WASTES THROUGH THE APPLICATION OF RECYCLE, RECOVERY, AND REUSE TECHNOLOGY. THE POLLUTANTS CONSIDERED IN THIS STUDY ARE BASICALLY ORGANIC AND INORGANIC BY-PRODUCTS FROM WASTEWATER EFFLUENTS, SOLID RESIDUE AND GASEOUS EMISSIONS FROM INDUSTRIAL OPERATIONS. THE FIRST SECTION CONTAINS CHAPTERS ON METHODOLOGY CURRENTLY AVAILABLE FOR RECOVERY OF INDUSTRIAL AND HAZARDOUS WASTE, AND DEVELOPING TECHNOLOGY FOR RECYCLE, REUSE AND RECOVERY. THE SECOND SECTION CONTAINS CHAPTERS ON 5 TECHNICAL CATEGORIES, USED FOR RECOVERY NAMELY, SORPTION, MOLECULAR SEPARATION, PHASE TRANSITION, CHEMICAL MODIFICATION, AND PHYSICAL DISPERSION AND SEPARATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010850

PUBLICATION DATE: SEP 82

TITLE: RISK-MANAGEMENT GUIDE.

PERSONAL AUTHOR: BRISCOE, G. J.

DESCRIPTOR: *ACCIDENT PREVENTION; *COSTS; *GUIDES; *HAZARDS; *MANAGEMENT; *RISK ANALYSIS; *RISK MANAGEMENT

DESCRIPTIVE NOTE: 226P. PRICE CODE: PC A11/MF A01; DE84000492

ABSTRACT: THE ROLE OF RISK ASSESSMENT IS TO PROVIDE THE NECESSARY INFORMATION TO MAKE DECISIONS REGARDING THE COST EFFECTIVE COMMITMENT OF RESOURCES TO ACCIDENT PREVENTION AND REDUCTION. RISK ASSESSMENT CAN ALSO BE USED TO DETERMINE IF A PROPOSED ACTION IS ACCEPTABLE IN THOSE SITUATIONS WHERE IT IS IMPRACTICAL TO ELIMINATE PARTICULAR HAZARDS. A LIMITATION IN THIS PROCESS IS THAT ESTIMATES OF FUTURE LOSSES ARE NECESSARILY BASED ON PROBABILITIES, STATISTICS, AND EVEN SUBJECTIVE JUDGMENT; AND THEREFORE CAN NEVER BE PRECISE. THE DECISION TO ALLOCATE RESOURCES, THUS, IS ALWAYS MADE IN THE FACE OF UNCERTAINTY. THE PURPOSE OF RISK ANALYSIS IS TO REDUCE THAT UNCERTAINTY AS MUCH AS PRACTICAL BY PROVIDING A FRAMEWORK FOR THE INCORPORATION OF ALL AVAILABLE INFORMATION REGARDING THE COSTS AND RISKS OF VARIOUS ALTERNATIVES. THIS GUIDE PROVIDES SOME METHODS FOR ANALYZING AND PRESENTING THIS DATA TO MANAGEMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010851

PUBLICATION DATE: JAN 84

TITLE: SCREENING METHODS FOR PAH (POLYNUCLEAR AROMATIC HYDROCARBON) PRIORITY POLLUTANTS IN WASTEWATER.

PERSONAL AUTHOR: RIGGIN, R. M.; STRUP, P. E.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *INDUSTRIAL WASTES; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *POLYNUCLEAR AROMATIC HYDROCARBONS; *PRIORITY POLLUTANTS; *SCREENING METHODS; *WASTEWATER

DESCRIPTIVE NOTE: 97P. PRICE CODE: PC A05/MF A01; PB84-132992

ABSTRACT: A SCREENING METHOD FOR THE DETERMINATION OF TOTAL POLYNUCLEAR AROMATIC HYDROCARBON (PAH) CONCENTRATION IN INDUSTRIAL EFFLUENTS WAS DEVELOPED. THE METHOD EMPLOYS SOLVENT EXTRACTION, ALUMINA COLUMN CHROMATOGRAPHIC CLEANUP, AND UV ABSORBANCE DETERMINATION. THE UV DETECTION STEP UTILIZES A BANDPASS FILTER IN ORDER TO OBTAIN MORE UNIFORM RESPONSE BETWEEN THE VARIOUS PAHS. THE PAH SCREENING METHOD RESULTS AND U. S. EPA METHOD 610 RESULTS HAVE BEEN FOUND TO BE POSITIVELY CORRELATED FOR A VARIETY OF INDUSTRIAL WASTEWATER SAMPLES. THE SCREENING METHOD CAN BE PERFORMED IN APPROXIMATELY ONE-HALF TO ONE-THIRD THE TIME REQUIRED FOR U. S. EPA METHOD 610 AND REQUIRES CONSIDERABLY LESS EXPENSIVE EQUIPMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010861

PUBLICATION DATE: SEP 83

TITLE: ANALYSIS OF INDUSTRIAL WASTEWATER FOR ORGANIC POLLUTANTS IN CONSENT DECREE SURVEY SAMPLES.

PERSONAL AUTHOR: BURSEY, J. T.; PELLIZZARI, E. D.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPOUND IDENTIFICATION; *EFFLUENTS; *INDUSTRIAL WASTES; *ORGANIC COMPOUNDS; *RECOMMENDATIONS; *SURVEYS; *WATER QUALITY CONTROL

DESCRIPTIVE NOTE: PB83-220103

ABSTRACT: INDUSTRIAL WASTEWATER WAS ANALYZED FOR ORGANIC POLLUTANTS OTHER THAN PRIORITY POLLUTANTS. OVERALL 546 COMPOUNDS WERE IDENTIFIED. THE REPORT LISTS COMPOUNDS THAT WERE FOUND WITH 10 OR MORE IDENTIFICATIONS. RECOMMENDATIONS FOR FURTHER WORK IN THE CHARACTERIZATION OF COMPONENTS OF

AQUEOUS INDUSTRIAL EFFLUENT EXTRACTS ARE INCLUDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010865

PUBLICATION DATE: SEP 83

TITLE: A COMPUTER SURVEY OF GC/MS DATA ACQUIRED IN EPA'S PRIORITY POLLUTANT SCREENING ANALYSIS: SYSTEM AND RESULTS.

PERSONAL AUTHOR: SHACKELFORD, W. M.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPUTER SURVEYS; *COSTS; *GAS CHROMOTOGRAPHY; *INDUSTRIAL WASTES; *MASS SPECTROMETRY; *PERFORMANCE EVALUATION; *PRIORITY POLLUTANTS; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PB83-220111

ABSTRACT: AUTOMATED SURVEY TECHNIQUES FOR PROCESSING GC/MS DATA APPEARED TO WORK WELL ON MOST OF THE DATA ENCOUNTERED IN THIS STUDY. THE CLEANUP-PBM PACKAGE WAS A COST EFFECTIVE PACKAGE. FURTHER WORK IS BEING DONE ON THIS PROCEDURE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010872

PUBLICATION DATE: NOV 83

TITLE: LITERATURE-REVIEW SCREENING TECHNIQUES FOR THE EVALUATION OF LAND TREATMENT OF INDUSTRIAL WASTES.

PERSONAL AUTHOR: BERKOWITZ, JOAN; AND OTHERS

DESCRIPTOR: *CYANIDE; *INDUSTRIAL WASTES; *LAND TREATMENT; *LITERATURE REVIEWS; *HAZARDOUS WASTES; *HEAVY METALS; *ORGANIC CHEMICALS; *SCREENING TECHNIQUES; *WASTE STREAMS; *WASTE TREATMENT

DESCRIPTIVE NOTE: PB84-110386

ABSTRACT: THIS REPORT DESCRIBES A FOUR-STAGE LITERATURE-REVIEW SCREENING PROCESS FOR IDENTIFYING WASTE STREAMS THAT WERE LISTED AS HAZARDOUS IN THE FEDERAL REGISTER (NOVEMBER 12, 1980). THE METHOD ALLOWS THE EVALUATION OF PROMISING CANDIDATE STREAMS FOR LAND TREATMENT THROUGH INORGANIC AND ORGANIC SCREENS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010874

PUBLICATION DATE: NOV 83

TITLE: PLANT-SCALE DEMONSTRATION OF SLUDGE INCINERATOR FUEL REDUCTION.

PERSONAL AUTHOR: VERDOUW, ALBERT J.; AND OTHERS

DESCRIPTOR: *CONTROL SYSTEMS; *COSTS; *DEMONSTRATION PROJECTS; *EFFICIENCY; *FUEL REDUCTION; *INCINERATORS; *EQUIPMENT; *RECOMMENDATIONS; *PERFORMANCE EVALUATION; *SEWAGE SLUDGE; *SLUDGE; *SLUDGE INCINERATORS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: PB83-259697

ABSTRACT: A FIELD RESEARCH AND DEMONSTRATION PROJECT WAS CONDUCTED TO REDUCE FUEL CONSUMPTION IN SLUDGE INCINERATORS BY USING A MORE FUEL EFFICIENT INCINERATOR OPERATING MODE AND IMPROVING INSTRUMENTATION AND CONTROL SYSTEMS. PROJECT ACTIVITIES AT INDIANAPOLIS, INDIANA ARE DESCRIBED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010890

PUBLICATION DATE: MAR 84

TITLE: VIDEOTEX INSTRUCTION--DESIGN AND PRODUCTION.

PERSONAL AUTHOR: NUGENT, GWEN C.

DESCRIPTOR: *DEVELOPMENT; *INSTRUCTION; *INSTRUCTIONAL MATERIALS; *VIDEOTEXT

DESCRIPTIVE NOTE: 55-59P.

ABSTRACT: DESCRIBED IS THE DESIGN AND PRODUCTION OF VIDEOTEX INSTRUCTION. SUGGESTIONS ARE GIVEN FOR FLOWCHARTING, SCRIPTING, GRAPHIC DESIGN, FRAME DEVELOPMENT, COMPUTER PROGRAMMING, AND DEBUGGING.

AVAILABILITY: E-I TV; V16 N3

IRIS ACCESSION NUMBER: EW010912

PUBLICATION DATE: APR 84

TITLE: TEMPLE UNIVERSITY AND A TELECOMMUNICATIONS PROCUREMENT PROGRAM.

PERSONAL AUTHOR: SCANLON, ROBERT G.; PATTERSON, JOHN K.

DESCRIPTOR: *COMPUTER ORIENTED PROGRAMS; HIGHER EDUCATION; *NETWORKS; *PROGRAM DEVELOPMENT; PROGRAM DESCRIPTIONS; *TELECOMMUNICATIONS

DESCRIPTIVE NOTE: 79-81P.

ABSTRACT: DESCRIBES HOW A 30,000-STUDENT INSTITUTION OF HIGHER LEARNING IS INSTALLING A CAMPUS-WIDE TELECOMMUNICATIONS SYSTEM SUPPORTING VOICE, DATA, AND VIDEO APPLICATIONS. OBJECTIVES OF THE TELECOMMUNICATIONS PROGRAM AND GUIDELINES USED IN ITS DEVELOPMENT ARE OUTLINED.

AVAILABILITY: TECHNOLOGICAL HORIZONS IN EDUCATION JOURNAL; V11 N7

IRIS ACCESSION NUMBER: EW010913

PUBLICATION DATE: APR 84

TITLE: PLANNING FOR TELECOMMUNICATIONS IN THE LIBERAL ARTS COLLEGE.

PERSONAL AUTHOR: NOLAN, ERNEST I.

DESCRIPTOR: *CABLE TELEVISION; *GUIDELINES; HIGHER EDUCATION; *PROGRAM DEVELOPMENT; *TELECOMMUNICATIONS; *TELECOURSES

DESCRIPTIVE NOTE: 82-85P.

ABSTRACT: DISCUSSES THE DEVELOPMENT OF A TELECOMMUNICATIONS PROGRAM AT MADONNA COLLEGE (MICHIGAN). USING THIS PROGRAM AS A MODEL, OFFERS PROCEDURAL GUIDELINES ON HOW OTHER INSTITUTIONS CAN UTILIZE LOCAL CABLE TELEVISION SYSTEMS FOR EXTENDED DELIVERY OF CURRICULA.

AVAILABILITY: TECHNOLOGICAL HORIZONS IN EDUCATION JOURNAL; V11 N7

IRIS ACCESSION NUMBER: EW010914

PUBLICATION DATE: APR 84

TITLE: FULL MOTION VIDEO TELECONFERENCING: HOW AND WHEN TO USE A NEW TECHNOLOGY.

PERSONAL AUTHOR: SPILLER, REX

DESCRIPTOR: *INSTRUCTIONAL DEVELOPMENT; PRODUCTIVITY; TEACHING METHODS; TRAINING; *TELECONFERENCING; TELECOMMUNICATIONS; *VIDEO EQUIPMENT

DESCRIPTIVE NOTE: 86-88P.

ABSTRACT: DISCUSSES THE EDUCATIONAL AND TRAINING APPLICATIONS OF FULL MOTION VIDEO TELECONFERENCING TO MAXIMIZE BENEFITS FOR ORGANIZATIONS USING THIS TECHNOLOGY. ELECTRONIC COMMUNICATION, COST CONTROL, IMPROVEMENT OF PRODUCTIVITY, AND INSTRUCTIONAL DEVELOPMENT ARE AMONG THE AREAS CONSIDERED.

AVAILABILITY: TECHNOLOGICAL HORIZONS IN EDUCATION JOURNAL; V11 N7

IRIS ACCESSION NUMBER: EW010915

PUBLICATION DATE: APR 84

TITLE: VIDEODISKS IN THE CLASSROOM.

PERSONAL AUTHOR: THORKILDSEN, RON; FRIEDMAN, SUSAN

DESCRIPTOR: *COURSEWARE; *COMPUTER ORIENTED PROGRAMS; HIGHER EDUCATION; *PROGRAM DESCRIPTIONS; *VIDEODISK RECORDINGS

DESCRIPTIVE NOTE: 90-95P.

ABSTRACT: VIDEODISK TECHNOLOGY CONSISTS OF THE VIDEODISK, THE VIDEODISK PLAYER, AND THE EQUIPMENT NECESSARY TO PRODUCE THE VIDEODISK. DESCRIBES VIDEODISK TECHNOLOGY AND ITS ADVANTAGES OVER SIMILAR MEDIA, ITS MOST PREVALENT USES, CURRENT EDUCATIONAL APPLICATIONS, AND COURSEWARE DEVELOPED BY THE INTERACTIVE VIDEODISK FOR SPECIAL EDUCATION TECHNOLOGY PROJECT.

AVAILABILITY: TECHNOLOGICAL HORIZONS IN EDUCATION JOURNAL; V11 N7

IRIS ACCESSION NUMBER: EW010916

PUBLICATION DATE: APR 84

TITLE: CURRICULUM DILEMMAS FOR ROBOTICS EDUCATORS.

PERSONAL AUTHOR: ASFAHL, C. RAY

DESCRIPTOR: ASSOCIATE DEGREES; *CURRICULUM DEVELOPMENT; *COLLEGE CURRICULUM; *COMPUTER ORIENTED PROGRAMS; *ENGINEERING EDUCATION; ENGINEERING; HIGHER EDUCATION; *ROBOTICS

DESCRIPTIVE NOTE: 98-103P.

ABSTRACT: DISCUSSES WHY EDUCATORS SHOULD NOT RUSH HEADLONG INTO CREATING ROBOTICS CURRICULA AND SUGGESTS METHODS OF ESTABLISHING MEANINGFUL COURSES. INDICATES THAT THE SOLUTION TO THE PROBLEM OF BUILDING A ROBOTIC CURRICULUM IS TO INCORPORATE THE THREE MAJOR AREAS OF ROBOTICS (DESIGN, OPERATIONS, MAINTENANCE) INTO EXISTING CURRICULA WHERE THEY BEST FIT.

AVAILABILITY: TECHNOLOGICAL HORIZONS IN EDUCATION JOURNAL; V11 N7

IRIS ACCESSION NUMBER: EW010917

PUBLICATION DATE: JAN 84

TITLE: ADVANCED TREATMENT FOR WASTEWATER RECLAMATION AT WATER FACTORY 21.

PERSONAL AUTHOR: MCCARTY, P. L.; AND OTHERS

DESCRIPTOR: *ADVANCED TREATMENT; *CALIFORNIA; *COSTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RECLAIMED WATER; *RECYCLING; WATER RESOURCES; WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 243P. PRICE CODE: PC A11/MF A01; PB84-148857

ABSTRACT: THE PERFORMANCE AND RELIABILITY OF WATER FACTORY 21 (WF21) IN ORANGE COUNTY, CALIFORNIA, FOR REMOVAL OF A BROAD RANGE OF ORGANIC, INORGANIC, AND BIOLOGICAL CONTAMINANTS FROM ACTIVATED-SLUDGE TREATED MUNICIPAL WASTEWATER WAS EVALUATED. WF21 FURNISHES RECLAIMED WATER FOR A HYDRAULIC BARRIER THAT PREVENTS INTRUSION OF SEA WATER INTO THE LOCAL FRESH WATER AQUIFER. THE OBJECTIVE OF THIS STUDY WAS TO PROVIDE SUFFICIENT LONG-TERM DATA ON PERFORMANCE, RELIABILITY, AND COST OF FULL-SCALE ADVANCED WASTEWATER TREATMENT TO AID IN THE EVALUATION OF ITS FEASIBILITY FOR THE PRODUCTION OF RECLAIMED WATER FOR POTABLE USE. OPERATIONAL PROBLEMS AND COSTS OF TREATMENT WERE DOCUMENTED, THE STATISTICAL RELIABILITY OF THE TREATMENT SYSTEM TO MEET CURRENT EPA DRINKING WATER REGULATIONS WAS EVALUATED, THE EFFICIENCY OF THE VARIOUS PROCESSES AND THE OVERALL SYSTEM TO REMOVE TRACE CONTAMINANTS WAS DETERMINED, THE EFFECTIVENESS OF THE SYSTEM IN REMOVING (OR PRODUCING) MUTAGENIC MATERIALS WAS DOCUMENTED, AND POTENTIAL SURROGATE PARAMETERS TO SERVE AS INDICATORS OF THE EFFECTIVENESS OF TREATMENT FOR CONTAMINANTS OF CONCERN WERE EVALUATED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010918

PUBLICATION DATE: SEP 83

TITLE: OPERATION, MAINTENANCE AND PERFORMANCE EVALUATION OF THE POTOMAC ESTUARY EXPERIMENTAL WATER TREATMENT PLANT. APPENDIX. VOLUME 1.

PERSONAL AUTHOR: MONTGOMERY, J. M.

DESCRIPTOR: *DESIGN; *DRINKING WATER; *EXPERIMENTAL FACILITIES; *FACILITIES; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *TECHNOLOGY; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 520P. PRICE CODE: PC A22/MF A01; AD-A136 865/3

ABSTRACT: THIS IS THE APPENDIX VOLUME I OF A TWO VOLUME SERIES. THIS VOLUME CONTAINS THE FOLLOWING SECTIONS: (1) SPECIALIZED ANALYSES AND QUALITY ASSURANCE; (2) DATA MANAGEMENT; (3) DYNAMIC ESTUARY MODEL DESCRIPTION; (4) PLANT DESIGN CRITERIA; AND (5) PLANT OPERATIONS DATA.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010919

PUBLICATION DATE: SEP 83

TITLE: OPERATION, MAINTENANCE AND PERFORMANCE EVALUATION OF THE POTOMAC ESTUARY EXPERIMENTAL WATER TREATMENT PLANT. APPENDIX. VOLUME 2.

PERSONAL AUTHOR: MONTGOMERY, J. M.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DRINKING WATER; *EXPERIMENTAL FACILITIES; *FACILITIES; *INFLUENTS; *MAINTENANCE; *ORGANIC COMPOUNDS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *TECHNOLOGY; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 866P. PRICE CODE: PC A99/MF A01; AD-A136 866/1

ABSTRACT: THIS IS VOLUME II OF A TWO-VOLUME SERIES. THIS VOLUME CONTAINS THE FOLLOWING SECTIONS: (1) CHARACTERIZATION OF INFLUENTS; (2) PROCESS PERFORMANCE; (3) CHARACTERIZATION OF FINISHED WATERS; (4) SPECIAL STUDIES AND INVESTIGATIONS; AND (5) ADDITIONAL ORGANICS ANALYTICAL PROGRAM.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010920

PUBLICATION DATE: SEP 83

TITLE: OPERATION, MAINTENANCE AND PERFORMANCE EVALUATION OF THE POTOMAC ESTUARY EXPERIMENTAL WATER TREATMENT PLANT. EXECUTIVE SUMMARY.

PERSONAL AUTHOR: MONTGOMERY, J. M.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COSTS; *DRINKING WATER; *EXPERIMENTAL FACILITIES; *FACILITIES; *MAINTENANCE; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *TECHNOLOGY; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 168P. PRICE CODE: PC A08/MF A01; AD-A136 861/2

ABSTRACT: THIS IS THE EXECUTIVE SUMMARY OF A PROJECT ON AN EXPERIMENTAL WATER TREATMENT PLANT. THE CONTENTS INCLUDE: (1) CONCLUSIONS; (2) MONITORING PROGRAM; (3) ANALYTICAL METHODS AND SAMPLING; (4) DATA ANALYSIS TECHNIQUES; (5) INFLUENT WATER QUALITY; (6) PROCESS PERFORMANCE; (7) EVALUATION OF FINISHED WATER QUALITY; (8) SPECIAL TESTING AND EVALUATION; AND (9) COSTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW010921

PUBLICATION DATE: SEP 83

TITLE: OPERATION, MAINTENANCE AND PERFORMANCE EVALUTATION OF THE POTOMAC ESTUARY EXPERIMENTAL WATER TREATMENT PLANT. MAIN VOLUME.

PERSONAL AUTHOR: MONTGOMERY, J. M.

DESCRIPTOR: *DRINKING WATER; *COSTS; *EXPERIMENTAL FACILITIES; *FACILITIES; *MAINTENANCE; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *WATER TREATMENT; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 916P. PRICE CODE: PC A99/MF A01; AD-A136 864/6

ABSTRACT: THE INVESTIGATION EVALUATED THE WATER QUALITY PRODUCED BY A 1.0 MGD DEMONSTRATION WATER TREATMENT PLANT (EEWTP), WHICH WAS LOCATED ADJACENT TO THE ESTUARY AT THE BLUE PLAINS WPCP (WATER POLLUTION CONTROL PLANT), WASHINGTON, D. C. BASED ON CERTAIN HYDROLOGIC CONDITIONS AND THE RESULTS OF THE EPA DYNAMIC ESTUARY MODEL, A RAW WATER MIX OF 50 PERCENT ESTUARY WATER AND 50 PERCENT NITRIFIED BLUE PLAINS SEWAGE EFFLUENT WAS SELECTED FOR TREATMENT. WITHIN THE LIMITS OF THE ANALYTICAL TECHNIQUES USED AND THE INFLUENT WATER QUALITY CONDITIONS OBSERVED IT WAS CONCLUDED THAT THE THREE PROCESS COMBINATIONS MONITORED WERE TECHNICALLY FEASIBLE OF PRODUCING A WATER ACCEPTABLE FOR HUMAN CONSUMPTION. ESTIMATED TREATMENT COST FOR A .200 MGD ESTUARY WATER TREATMENT PLANT, USING DESIGN AND OPERATING CRITERIA SIMILIAR TO THAT USED IN THE EEWTP, ARE APPROXIMATELY 34.3 CENT/1000 GALLONS FOR THE FIRST ALUM MODE AND 47.6 CENT/1000 GALLONS FOR THE LIME MODE OF OPERATIONS. DUE TO UNCERTAINTIES OVER THE PLANT'S LOCATION, INTAKE AND CERTAIN FINISHED WATER STRUCTURES AND RELATED COSTS WERE EXCLUDED FROM THE COST ESTIMATES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010922

PUBLICATION DATE: 83

TITLE: WATER TREATMENT PLANT OPERATION. VOLUME 2. A FIELD STUDY TRAINING PROGRAM.

DESCRIPTOR: CHEMICAL ANALYSIS; *COURSE CONTENT; *DRINKING WATER; FACILITIES; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *OPERATIONS (WATER); *POSTSECONDARY EDUCATION; *TRAINING; WATER; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 655P. PRICE: $30.00

ABSTRACT: THE PURPOSE OF THIS WATER TREATMENT FIELD STUDY TRAINING PROGRAM IS TO: (1) DEVELOP NEW QUALIFIED WATER TREATMENT PLANT OPERATORS; (2) EXPAND THE ABILITIES OF EXISTING OPERATORS, PERMITTING BETTER SERVICE BOTH TO EMPLOYERS AND PUBLIC; AND (3) PREPARE OPERATORS FOR CIVIL SERVICE AND CERTIFICATION EXAMINATIONS (EXAMINATIONS ADMINISTERED BY STATE/PROFESSIONAL ASSOCIATIONS WHICH OPERATORS TAKE TO INDICATE A LEVEL OF PROFESSIONAL COMPETENCE). THE VOLUME CONTAINS INFORMATION ON: IRON AND MAGANESE CONTROL; FLORIDATION; SOFTENING; TRIHALOMETHANES; DEMINERALIZATION; HANDLING AND DISPOSAL OF PROCESSED WATERS; MAINTENANCE; INSTRUMENTATION; SAFTY; ADVANCED LABORATORY PROCEDURES; DRINKING WATER REGULATIONS; AND ADMINISTRATION. OBJECTIVES, GLOSSARY, LESSONS, QUESTIONS (WITH SUGGESTED ANSWERS), AND TESTS ARE PROVIDED FOR EACH CHAPTER. FINAL EXAMINATION (WITH ANSWERS), SOLVING WATER TREATMENT PLANT ARITHMETIC PROBLEMS, WATER ABBREVIATIONS, COMPLETE GLOSSARY, AND SUBJECT INDEX ARE PROVIDED IN AN APPENDIX. INFORMATION ON OBJECTIVES, SCOPE, AND USES OF THIS MANUAL AND INSTRUCTIONS TO PARTICIPANTS IN HOME-STUDY COURSES ARE FOUND IN VOLUME 1.

AVAILABILITY: KEN KERRI, CALIFORNIA STATE UNIVERSITY, 6000 "J" STREET, SACRAMENTO, CA 95819

IRIS ACCESSION NUMBER: EW010923

PUBLICATION DATE: 83

TITLE: WATER RIGHTS: SCARCE RESOURCE ALLOCATION, BUREAUCRACY, AND THE ENVIRONMENT.

PERSONAL AUTHOR: ANDERSON, TERRY L.

DESCRIPTOR: *ECONOMICS; *FEDERAL POLICIES; *IRRIGATION; *PROPERTY RIGHTS; *PRIVATIZATION; *POLICIES; *WATER RATES; *WATER RESOURCES; *WATER RIGHTS; *WATER SUPPLY

DESCRIPTIVE NOTE: 320P. PRICE: $32.50

ABSTRACT: PRESENTED IS SELECTED INFORMATION ON THE TOPIC OF WATER RIGHTS. SECTIONS ARE INCLUDED ON (1) PROPERTY RIGHTS AND DECISION MAKING, (2) INSTITUTIONS AND INSTITUTIONAL REFORM, AND (3) PRIVATIZATION.

AVAILABILITY: BALLINGER PUBLISHING COMPANY, 54 CHURCH STREET, CAMBRIDGE, MA 02138

IRIS ACCESSION NUMBER: EW010925

PUBLICATION DATE: 83

TITLE: HANDBOOK OF WATER HARVESTING.

DESCRIPTOR: *AGRICULTURE; *DESIGN; *FACILITIES; *NATURAL RESOURCES; *WATER COLLECTION; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 45P. PRICE: $4.00

ABSTRACT: WATER HARVESTING, THE COLLECTION AND STORAGE OF PRECIPITATION RUNOFF, IS A METHOD OF PROVIDING WATER FOR ANIMALS AND DOMESTIC USE IN DRY AREAS. THIS BOOK SHOWS HOW TO DESIGN, BUILD, AND MAINTAIN VARIOUS WATER-HARVESTING SYSTEMS.

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AVAILABILITY: SUPERINTENDENT OF DOCUMENTS, U. S. GOVERNMENT PRINTING OFFICE, DEPT. 33, WASHINGTON, DC 20402

IRIS ACCESSION NUMBER: EW010928

PUBLICATION DATE: 83

TITLE: GEOTECHNICAL ENGINEERING INVESTIGATION MANUAL.

PERSONAL AUTHOR: HUNT, ROY E.

DESCRIPTOR: *CONSTRUCTION; *ENGINEERING; *FIELD INSTRUMENTATION; *GEOLOGY; *GEOLOGIC HAZARDS; *INSTRUCTIONAL MATERIALS; *MEASUREMENT; *ROCKS; *SITE INVESTIGATIONS; *SOILS; *WATER

DESCRIPTIVE NOTE: 983P. PRICE: $79.95

ABSTRACT: THE BOOK IS DIVIDED INTO THREE MAJOR PARTS. THE FIRST PART, INVESTIGATION METHODS AND PROCEDURES, COVERS EXPLORATION, MEASUREMENT OF PROPERTIES, AND FIELD INSTRUMENTATION. PART II, CHARACTERISTICS OF GEOLOGICAL MATERIALS AND FORMATIONS DISCUSSES THE IDENTIFICATION AND CLASSIFICATION OF ROCKS AND SOILS, ROCK-MASS CHARACTERISTICS, GEOLOGIC CLASSES AND CHARACTERISTICS OF SOIL FORMATIONS, AND SURFACE AND SUBSURFACE WATERS. PART III, THE GEOLOGIC HAZARDS, PRESENTS LANDSLIDES AND OTHER SLOPE FAILURES, GROUND SUBSIDENCE, COLLAPSE AND HEAVE, AND EARTHQUAKES. THE APPENDICES COVER THE EARTH AND GEOLOGIC HISTORY, SOURCES OF GEOLOGIC INFORMATION, CONVERSION TABLES, AND SYMBOLS. THE BOOK IS ILLUSTRATED WITH HUNDREDS OF PHOTOGRAPHS, DRAWINGS, AND OTHER ILLUSTRATIONS INCLUDING A SERIES OF COLOR PLATES SHOWING DIFFERENT ROCK TYPES. NUMEROUS TABLES, GRAPHS, AND CHARTS PRESENT PRACTICAL INFORMATION IN AN EASILY USED FASHION.

AVAILABILITY: MCGRAW-HILL BOOK COMPANY, 1221 AVENUE OF THE AMERICAS, NEW YORK, NY 10020

IRIS ACCESSION NUMBER: EW010931

PUBLICATION DATE: 83

TITLE: CONTROL OF INORGANIC CONTAMINANTS.

DESCRIPTOR: *DRINKING WATER; *CHEMICALS; *INORGANIC CONTAMINANTS; *INORGANIC CHEMICALS; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WATER); *POSTSECONDARY EDUCATION; *WATER TREATMENT; *WATER SUPPLY

DESCRIPTIVE NOTE: 160P. PRICE: $10.44 MEMBER; $14.50 NONMEMBER

ABSTRACT: THIS BOOK DISCUSSES TECHNIQUES FOR REMOVING INORGANIC CONTAMINANTS FROM A WATER SUPPLY SYSTEM.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, DATA PROCESSING DEPARTMENT, 6666 W. QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010934

PUBLICATION DATE: 84

TITLE: CHANGING METAL CYCLES AND HUMAN HEALTH.

PERSONAL AUTHOR: NRIAGU, J. O.

DESCRIPTOR: *AIR POLLUTION; *FOOD CHAINS; *HEAVY METALS; *INSTRUCTIONAL MATERIALS; *METALS; *PUBLIC HEALTH; *POLLUTION; *POLLUTION CONTROL; *TOXIC SUBSTANCES; *WATER POLLUTION

DESCRIPTIVE NOTE: 400P. PRICE: $21.50

ABSTRACT: THIS VOLUME EXPLORES THE PROBLEM OF METAL POISONNING IN INDUSTRIALIZED SOCIETIES, WITH AN EMPHASIS ON: (1) IMPACT OF HUMAN ACTIVITIES ON THE CYCLING AND ACCUMULATION OF POLLUTANT METALS IN THE VARIOUS COMPONENTS OF THE BIOSPHERE, (2) SOURCES, EXPOSURE ROUTES, AND METABOLISM OF KEY POLLUTANT METALS, (3)EARLY SENTINELS OF CHRONIC METAL POISONING. "CHANGING METAL CYCLES AND HUMAN HEALTH" IDENTIFIES CRITICAL GAPS IN EXISTING KNOWLEDGE, AND THE AUTHORS RECOMMEND RESEARCH NEEDED TO ESTIMATE THE EXTENT OF THE HEALTH PROBLEMS AND THE RISKS ASSOCIATED WITH CURRENT AND ANTICIPATED LEVELS OF ENVIRONMENTAL METAL POLLUTION.

AVAILABILITY: SPRINGER-VERLAG NEW YORK INC., O. O. BOX 2485, SECAUCUS, NJ 07094

IRIS ACCESSION NUMBER: EW010935

PUBLICATION DATE: 84

TITLE: HEAVY METALS IN NATURAL WATERS: APPLIED MONITORING AND IMPACT ASSESSMENT.

PERSONAL AUTHOR: MOORE, JAMES W.; RAMAMOORTHY, S.

DESCRIPTOR: ARSENIC; CADMIUM; CHROMIUM; COPPER; *ENVIRONMENT; *HEAVY METALS; LEAD; *INSTRUCTIONAL MATERIALS; *IMPACT ASSESSMENT; *MANAGEMENT; *MONITORING; MERCURY; NICKEL; *NATURAL WATERS; ZINC; *WATER QUALITY; *WATER POLLUTION

DESCRIPTIVE NOTE: 268P. PRICE: $38.00

ABSTRACT: THIS IS A PRACTICAL REVIEW OF THE PRINCIPLES AND METHODS OF MONITORING AND ASSESSING HEAVY METAL POLLUTION IN NATURAL WATERS. THE AUTHORS PRESENT EXTENSIVE INFORMATION FOR THE MOST COMMON HEAVY METALS, INCLUDING INDUSTRIAL USES, PRODUCTION, DISCHARGES, CHEMICAL BEHAVIOR, TOXICITY, RESIDUE DYNAMICS, AND IMPACT. THEY CRITICALLY EVALUATE CURRENT METHODS USED IN MONITORING AND IMPACT ASSESSMENTS, AND MAKE RECOMMENDATIONS FOR IMPROVING MANAGEMENT STRATEGIES. THE FINAL CHAPTER DEALS WITH THE INTERACTIONS OF POLITICS AND ENVIRONMENTAL MANAGEMENT.

AVAILABILITY: SPRINGER-VERLAG NEW YORK INC., P. O. BOX 2485, SECAUCUS, NJ 07094

IRIS ACCESSION NUMBER: EW010936

PUBLICATION DATE: 82

TITLE: FINITE ELEMENTS IN WATER RESOURCES.

PERSONAL AUTHOR: HOLZ, K. P.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CONFERENCE PROCEEDINGS; *FINITE ELEMENTS; *FLUID FLOW; *FLUID MECHANICS; *GROUNDWATER; *MODELS; *NUMERICAL TECHNIQUES; *SIMULATION; *SURFACE WATER; *TRANSPORT PROCESSES; *WATER RESOURCES

DESCRIPTIVE NOTE: 1130P. PRICE: $74.90

ABSTRACT: THESE TWO VOLUMES ARE THE PROCEEDINGS OF THE 1982 INTERNATIONAL CONFERENCE ON THE PRACTICAL APPLICATIONS OF FINITE ELEMENT METHODS TO WATER RESOURCES PROBLEMS. THEY PROVIDE AN ACCOUNT OF A FORUM WHERE SCIENTISTS AND ENGINEERS DISCUSSED THE ACCURACY, ECONOMY, IMPROVEMENTS AND LIMITATIONS OF FINITE ELEMENT TECHNIQUES. THE PROCEEDINGS REPRESENT THE STATE OF THE ART IN FINITE ELEMENTS, WITH CONTRIBUTIONS THAT DEAL WITH SEVERAL IMPORTANT AREAS: (1) GROUND WATER FLOW (AQUIFER SIMULATION, WELL HYDRAULICS, SEEPAGE); (2) SURFACE WATER FLOW (ESTUARY SIMULATION, TIDAL MOTION, WAVE COMPUTATION, SEDIMENTOLOGY); (3) FLUID MECHANICS (NAVIER-STOKES EQUATION, BOUNDARY LAYERS, LAMINAR AND TURBULENT FLOW); (4) NUMERICAL TECHNIQUES.

AVAILABILITY: SPRINGER-VERLAG NEW YORK INC., P. O. BOX 2485, SECAUCUS, NJ 07094

IRIS ACCESSION NUMBER: EW010937

PUBLICATION DATE: 83

TITLE: METAL POLLUTION IN THE AQUATIC ENVIRONMENT.

PERSONAL AUTHOR: FORSTNER, U.; WITTMANN, G. T. W.

DESCRIPTOR: *AQUATIC ENVIRONMENT; *ANALYTICAL TECHNIQUES; *HEAVY METALS; *LAKES; *METAL; *OCEANS; *RESEARCH; *RIVERS; *WATER TREATMENT

DESCRIPTIVE NOTE: 486P. PRICE: $29.00

ABSTRACT: THIS BOOK PROVIDES BACKGROUND INFORMATION ON MANAGING THE ENVIRONMENT. SECTIONS ARE INCLUDED ON TOXIC METALS, METAL CONCENTRATIONS IN RIVERS, LAKES, AND OCEAN WATERS, METAL POLLUTION ASSESSMENT FROM SEDIMENT ANALYSIS, METAL TRANSFER BETWEEN SOLID AND AQUEOUS PHASES, HEAVY METALS IN AQUATIC ORGANISMS AND TRACE METALS IN WATER PURIFICATION PROCESSES.

AVAILABILITY: SPRINGER-VERLAG NEW YORK INC., P. O. BOX 2485, SECAUCUS, NJ 07094

IRIS ACCESSION NUMBER: EW010938

PUBLICATION DATE: 84

TITLE: EFFLUENT TRANSPORT AND DIFFUSION MODELS FOR THE COASTAL ZONE.

PERSONAL AUTHOR: LAM, D. C. L.; AND OTHERS

DESCRIPTOR: *COASTAL ZONES; *COLLEGE SCIENCE; *DIFFUSION MODELS; *EFFLUENTS; *EFFLUENT TRANSPORT; *INSTRUCTIONAL MATERIALS; *LAKES; *LIMNOLOGY; *MODELS; *OCEANS; *OCEANOGRAPHY; *TRANSPORT SYSTEMS

DESCRIPTIVE NOTE: 168P. PRICE: $17.00

ABSTRACT: THIS VOLUME DESCRIBES THE IMPORTANT PHYSICAL AND MATHEMATICAL ASPECTS OF DEVELOPING TRANSPORT AND DISPERSION MODELS FOR EFFLUENT DISCHARGES IN THE COASTAL ZONES OF LAKES AND OCEANS. THE AUTHORS SUMMARIZE PREVIOUS ANALYTICAL FINDINGS, AND PRESENT NEW APPROACHES, INCLUDING THE FINITE ELEMENT AND FINITE DIFFERENCE METHODS IN TREATING LENGTH SCALE DEPENDENT TURBULENT DIFFUSION. THE AUTHORS USE BOTH THEORETICAL ANALYSES AND NUMERICAL EXAMPLES TO THOROUGHLY EXPLAIN THE TOPIC. IN ORDER TO BRIDGE THE GAP TO PRACTICAL APPLICATIONS, THE SUCCESSES AND PITFALLS OF THE COMPUTATIONAL METHODS AND PHYSICAL FORMULATIONS ARE DESCRIBED. FIELD DATA AND APPLICATION EXAMPLES AT VARIOUS COASTAL SITES ARE PRESENTED TO VERIFY THE MODELS.

AVAILABILITY: SPRINGER-VERLAG NEW YORK INC., P. O. BOX 2485, SECAUCUS, NJ 07094

IRIS ACCESSION NUMBER: EW010939

PUBLICATION DATE: 84

TITLE: POLLUTANTS IN POROUS MEDIA: THE UNSATURATED ZONE BETWEEN SOIL SURFACE AND GROUNDWATER.

PERSONAL AUTHOR: YARON, B.; AND OTHERS

DESCRIPTOR: *CASE STUDIES; *ECOLOGY; *GROUNDWATER; *MODELS; *MANAGEMENT; *POLLUTION TRANSPORT; *POLLUTION; *POROUS MEDIA; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 300P. PRICE: $49.00

ABSTRACT: THIS BOOK DESCRIBES THE ADSORPTION, PERSISTENCE, AND TRANSPORT OF POLLUTANTS IN THE UNSATURATED ZONE BETWEEN SOIL SURFACE AND GROUNDWATER. THIS ZONE MAY ACT AS A FILTER OR RESERVOIR FOR THE POLLUTANTS REACHING THE ECOLOGICAL SYSTEM. TOPICS INCLUDE: (1) THE SURFACE INTERACTIONS BETWEEN POLLUTANTS AND POROUS MEDIA, (2) THE BIOLOGICAL PROCESSES GOVERNING THEIR PERSISTENCE IN THE UNSATURATED ZONE, (3) NEW WAYS OF MODELLING POLLUTANT TRANSPORT THROUGH POROUS, AND (4) CASE STUDIES DEALING WITH POLLUTION SOURCES AND MANAGEMENT.

AVAILABILITY: SPRINGER-VERLAG NEW YORK INC., P. O. BOX 2485, SECAUCUS, NJ 07094

IRIS ACCESSION NUMBER: EW010949

PUBLICATION DATE: MAY 84

TITLE: INTERNATIONAL ENVIRONMENTAL POLICY.

PERSONAL AUTHOR: CALDWELL, LYNTON KEITH

DESCRIPTOR: *ATMOSPHERE; *BIOSPHERE; *EARTH; *ENVIRONMENT; *INTERNATIONAL COOPERATION; *INTERNATIONAL PROBLEMS; *LAND USE; *NATURAL RESOURCES; *POLICIES; *OCEANS; *SPACE; *UNEP; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 450P. PRICE: $37.50 CLOTH; $14.75 PAPER.

ABSTRACT: WHILE PREVIOUS STUDIES HAVE CONCENTRATED ON ENVIRONMENTAL ISSUES AND RELATED POLICY ON A NATIONAL LEVEL, CALDWELL CHRONICLES THE EMERGENCE OF A GLOBAL, INTERNATIONAL MOVEMENT AIMED AT DEFENDING THE ENVIRONMENT, DRAWING ON SCIENTIFIC AND TECHNOLOGICAL DATA. CALDWELL DETAILS THE FORMATION AND ACTIVITIES OF INTERNATIONAL AGENCIES ACTING ON BEHALF OF BOTH OUR CULTURAL AND NATURAL ENVIRONMENTS.

AVAILABILITY: DUKE UNIVERSITY PRESS, BOOKS 8 JOURNALS, 6697 COLLEGE STATION, DURHAM, NC 27708

IRIS ACCESSION NUMBER: EW010950

PUBLICATION DATE: 83

TITLE: THE POLITICS ON HAZARDOUS WASTE MANAGEMENT.

PERSONAL AUTHOR: LESTER, JAMES P.; BOWMAN, ANN O'M.

DESCRIPTOR: *FEDERAL ROLE; *HAZARDOUS WASTES; *INDUSTRY; *LOCAL GOVERNMENT; *MANAGEMENT; *PLANNING; *POLICIES; *POLITICS; *PUBLIC PARTICIPATION; *STATE ROLE; *REGULATIONS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 327P. PRICE: $32.75 CLOTH; $12.75 PAPER

ABSTRACT: THIS COLLECTION OF RESEARCH FOCUSES ON THE INTERRELATIONSHIPS AMONG VARIOUS GOVERNMENT AGENCIES, POLITICAL PARTIES, ENVIRONMENTAL GROUPS AND OTHERS IN THE FORMULATION, IMPLEMENTATION, AND EVALUATION OF PUBLIC POLICY IN REGARD TO WASTE REGULATION. HAZARDOUS WASTE MANAGEMENT IS CONSIDERED FROM A VARIETY OF VIEWPOINTS - FEDERAL, STATE, AND LOCAL GOVERNMENTS AS WELL AS THE PRIVATE SECTOR.

AVAILABILITY: DUKE UNIVERSITY PRESS, BOOKS 8 JOURNALS, 6697 COLLEGE STATION, DURHAM, NC 27708

IRIS ACCESSION NUMBER: EW010951

PUBLICATION DATE: 84

TITLE: NATIONAL WATER SUMMARY 1983-HYDROLOGIC EVENTS AND ISSUES.

PERSONAL AUTHOR: WIEDEMAN, VARLEY E.

DESCRIPTOR: *FLOODS; *GROUNDWATER; *HYDROLOGY; *ISSUES; *MANAGEMENT; *NATURAL RESOURCES; *NATIONAL ISSUES; *PUBLIC HEALTH; *STATE ISSUES; *WATER RESOURCES; *WATER QUALITY; *WATER SUPPLY

DESCRIPTIVE NOTE: 243P. PRICE: $9.00

ABSTRACT: THIS PUBLICATION COVERS A VARIETY OF WATER RELATED TOPICS. INCLUDED ARE INFORMATION ON THE HYDROLOGIC CYCLE, HYDROLOGIC EVENTS DURING 1982 AND 1983, GROUNDWATER, WATER QUALITY, NATIONAL WATER ISSUES, AND STATE WATER ISSUES. EXTENSIVE USE IS MADE OF ILLUSTRATIONS AND MAPS.

AVAILABILITY: BRANCH OF DISTRIBUTION, TEXT PRODUCTS SECTION, USGS, 604 S. PICKETT STREET, ALEXANDRIA, VA 22304

IRIS ACCESSION NUMBER: EW010952

PUBLICATION DATE: 83

TITLE: OCCURRENCE AND REMOVAL OF VOLATILE ORGANIC CHEMICALS FROM DRINKING WATER.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *DRINKING WATER; *ECONOMICS; *MONITORING; *OPERATIONS (WATER); *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *TOXICOLOGY; *WATER TREATMENT

DESCRIPTIVE NOTE: PRICE: $15.00 NONMEMBERS; $12.00 MEMBERS.

ABSTRACT: THIS IS A TWO VOLUME REPORT THAT PROVIDES INFORMATION ON (1) THE OCCURRENCE AND SOURCE OF ORGANICS IN THE ENVIRONMENT, PROVEN ANALYTICAL AND MONITORING TECHNIQUES FOR THEIR DETECTION, THE TOXICOLOGICAL SIGNIFICANCE OF THEIR PRESENCE IN DRINKING WATER, PRACTICAL AND ECONOMIC REMOVAL PROCESSES FOR THE VARIOUS TYPES AND DIFFERING LEVELS OF CONTAMINANTS, AND STRATEGIES FOR EVALUATING ALTERNATIVE CONTROL TECHNIQUES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, RESEARCH FOUNDATION, COMPUTER SERVICES. 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010953

PUBLICATION DATE: 83

TITLE: ACTIVATED CARBON IN DRINKING WATER TECHNOLOGY.

DESCRIPTOR: *ACTIVATED CARBON; *DRINKING WATER; *GRANULAR ACTIVATED CARBON; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *POSTSECONDARY EDUCATION; *WATER TREATMENT; *TECHNOLOGY

DESCRIPTIVE NOTE: PRICE: $15.00 NONMEMBERS; $12.00 MEMBERS

ABSTRACT: THIS PUBLICATION WAS AUTHORED BY A NUMBER OF

SCIENTISTS, ENGINEERS, AND UTILTIY MANAGERS. TOPICS ADDRESSED INCLUDE (1) THEORY, OBJECTIVES, AND PERFORMANCE OF GRANULAR ACTIVATED CARBON; (2) OPERATIONAL DATA AND EXPERIENCE FROM FULL-SCALE TREATMENT PLANTS; AND (3) TOXICOLOGICAL ASSESSMENT OF OPERATIONAL FACILITIES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, RESEARCH FOUNDATION, COMPUTER SERVICES, 6666 WEST QUINCY AVENUE, DENVER, CO 80235

IRIS ACCESSION NUMBER: EW010954

PUBLICATION DATE: JAN 84

TITLE: TECHNICAL PLAN FOR THE GREAT LAKES ENVIRONMENTAL RESEARCH LABORATORY.

PERSONAL AUTHOR: AUBERT, EUGENE J.

DESCRIPTOR: ECOLOGY; EUTROPHICATION; *GERL; *GREAT LAKES; HYDROLOGY; *LAKES; NUTRIENT CYCLING; LAKE ICE; MODELING; NATURAL RESOURCES; PARTICLE DYNAMICS; RESEARCH; *RESEARCH PROGRAMS; TEMPERATURE; WATER RESOURCES; TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 73P.

ABSTRACT: THIS TECHNICAL PLAN, THE TENTH IN AN ANNUAL SERIES, DOCUMENTS THE GREAT LAKES ENVIRONMENTAL RESEARCH LABORATORY (GERL) RESEARCH PROGRAM AS OF DEC, 1983. PROJECTS AND TASKS ARE DESCRIBED. PROJECTS INCLUDE RESEARCH ON WATER MOVEMENTS AND TEMPERATURE, CYCLING OF TOXIC ORGANICS, PARTICLE DYNAMICS, ECOLOGY, EUTROPHICATION AND NUTRIENT CYCLING, HYDROLOGY, LAKE ICE, MODELING, AND INFORMATION SERVICES.

AVAILABILITY: NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH, ENVIRONMENTAL RESEARCH LABORATORIES, GREAT LAKES ENVIRONMENTAL RESEARCH LABORATORY, 2300 WASHTENAW AVENUE, ANN ARBOR, MI 48104

IRIS ACCESSION NUMBER: EW010955

PUBLICATION DATE: 84

TITLE: AQUALINE-ONLINE USER GUIDE.

DESCRIPTOR: *AQUALINE; *DATABASES; *INFORMATION DISSEMINATION; *ONLINE DATABASES; *RESEARCH; *TECHNOLOGY; *WATER; *WASTEWATER

DESCRIPTIVE NOTE: 60P.

ABSTRACT: DESCRIBED IS THE AQUALINE DATABASE CREATED BY THE WATER RESEARCH CENTRE. THE DATABASE COVERS A SUBSTANTIAL AMOUNT OF THE WORLD'S LITERATURE ON WATER AND WASTEWATER TECHNOLOGY AND ENVIRONMENTAL PROTECTION. IT IS AIMED PRIMARILY AT PRACTICING SCIENTISTS AND ENGINEERS. THIS PUBLICATION EXPLAINS HOW TO SEARCH AQUALINE, SOURCE PERIODICALS FOR AQUALINE, AND HOW TO OBTAIN MATERIALS RELATED TO AQUALINE.

AVAILABILITY: WATER RESEARCH CENTRE, P. O. BOX 16, HENLEY ROAD, MEDMENHAM, MARLOW, BUCKS SL7 2HD, ENGLAND

IRIS ACCESSION NUMBER: EW010956

PUBLICATION DATE: 84

TITLE: RAW WATER PREPARATION.

DESCRIPTOR: *CHEMICALS; *COAGULATION; *DRINKING WATER; *DIRECTORIES; *EQUIPMENT; *FACILITIES; *MANUFACTURERS; *OPERATIONS (WATER); *PACKAGE PLANTS; *SCREENS; *SEDIMENTATION; *WATER TREATMENT

DESCRIPTIVE NOTE: C3-C10P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9387). LISTED IN THIS SECTION ARE MANUFACTURERS FOR VARIOUS ASPECTS OF RAW WATER PREPARATION. INCLUDED ARE ITEMS RELATED TO INTAKES AND SCREENS, COAGULATION, SEDIMENTATION, AND PACKAGE PLANTS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010957

PUBLICATION DATE: 84

TITLE: FILTRATION.

DESCRIPTOR: *DRINKING WATER; *DIRECTORIES; *EQUIPMENT; *FACILITIES; *FILTRATION; *MANUFACTURERS; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: C10-C14P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9388). LISTED IN THIS SECTION ARE MANUFACTURERS FOR VARIOUS ASPECTS OF FILTRATION OF WATER. INCLUDED ARE ITEMS RELATED TO MICROSTRAINERS AND MICROSCREENS, CONVENTIONAL FILTRATION, COMPLETE PLANTS, AND DIATOMITE FILTERS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010958

PUBLICATION DATE: 84

TITLE: SOFTENING, IRON AND MANGANESE REMOVAL.

DESCRIPTOR: *DRINKING WATER; *DIRECTORIES; *EQUIPMENT; *FACILITIES; *IRON; *MANGANESE; *MANUFACTURERS; *OPERATIONS (WATER); *SOFTENING; *WATER TREATMENT

DESCRIPTIVE NOTE: C15-C19P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9389). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO SOFTENING, AND IRON AND MANGANESE REMOVAL. INCLUDED ARE DISCUSSIONS OF LIMITING CONCENTRATIONS, SOFTENING, DESALTING TECHNIQUES, REMOVAL OF IRON AND MANGANESE, AND FLOURIDE ADJUSTMENT.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010959

PUBLICATION DATE: 84

TITLE: DISINFECTION, TASTE AND ODOR CONTROL.

DESCRIPTOR: *DISINFECTION; *DIRECTORIES; *DRINKING WATER; *EQUIPMENT; *FACILITIES; *MANUFACTURERS; *ODORS; *OPERATIONS (WATER); *TASTES; *WATER TREATMENT

DESCRIPTIVE NOTE: C20-C25P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9390). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO DISINFECTION, TASTE, AND ODOR CONTROL. INCLUDED ARE DISCUSSIONS OF DISINFECTION, TASTE AND ODOR CONTROL, AND AERATION AND DEAERATION.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010960

PUBLICATION DATE: 84

TITLE: MAINS AND SERVICES.

DESCRIPTOR: *DIRECTORIES; *DRINKING WATER; *EQUIPMENT; *FACILITIES; *MANUFACTURERS; *WATER MAINS; *OPERATIONS (WATER); *PIPES; *WATER DISTRIBUTION; *WATER PIPES

DESCRIPTIVE NOTE: C25-C35P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9391). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO MAINS AND SERVICES. INCLUDED ARE DISCUSSIONS OF DUCTILE IRON MAINS, PLASTIC PIPE, STEEL PIPE, ASBESTOS-CEMENT PIPE, CONCRETE PRESSURE PIPE, SERVICES, CORPORATION AND CURB STOPS, AND PIPE HANDLING EQUIPMENT.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010961

PUBLICATION DATE: 84

TITLE: PUMPS AND MOTORS.

DESCRIPTOR: *DIRECTORIES; *DRINKING WATER; *EQUIPMENT; *MANUFACTURERS; *MOTORS; *OPERATIONS (WATER); *PUMPS; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: C35-C41P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9392). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO PUMPS AND MOTORS. INCLUDED ARE DISCUSSIONS OF CENTRIFUGAL PUMPS, DISPLACEMENT PUMPS, DEEP WELL PUMPS, PNEUMATIC SYSTEMS, ENGINES, AUTOMATIC OPERATION, AND SOLAR ENERGY.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010962

PUBLICATION DATE: 84

TITLE: VALVES AND HYDRANTS.

DESCRIPTOR: *DIRECTORIES; *EQUIPMENT; *HYDRANTS; *MANUFACTURERS; *OPERATIONS (WATER); *VALVES; *WATER DISTRIBUTION; *WATER SUPPLY

DESCRIPTIVE NOTE: C41-C47P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9393). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO VALVES AND HYDRANTS. DISCUSSIONS OF VALVES AND HYDRANTS ARE INCLUDED.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010963

PUBLICATION DATE: 84

TITLE: WATER STORAGE.

DESCRIPTOR: *DIRECTORIES; *DRINKING WATER; *EQUIPMENT; *MANUFACTURERS; *MAINTENANCE; *OPERATIONS (WATER); *RESERVOIRS; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER STORAGE; *WATER TREATMENT; *WATER TANKS

DESCRIPTIVE NOTE: C48-C56P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9394). LISTED IS THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO WATER STORAGE. INCLUDED ARE DISCUSSIONS OF ELEVATED STORAGE, GROUND STORAGE, COATING SYSTEMS, CATHODIC PROTECTION, CONCRETE TANKS, AUTOMATIC OPERATION, DEVELOPING GROUNDWATER, AND SURFACE RESERVOIRS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010964

PUBLICATION DATE: 84

TITLE: METERING, MONITORING AND QUALITY CONTROL.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DIRECTORIES; *DRINKING WATER; *EQUIPMENT; *LABORATORY EQUIPMENT; *MANUFACTURERS; *METERS; *MONITORING; *OPERATIONS (WATER); *WATER METERS; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: C57-C69P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9395). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO METERING, MONITORING, AND QUALITY CONTROL. DISCUSSIONS RELATED TO METERING, MONITORING, AND QUALITY CONTROL ARE INCLUDED.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010965

PUBLICATION DATE: 84

TITLE: SYSTEM MAINTENANCE.

DESCRIPTOR: *CONTRACT OPERATIONS; *DIRECTORIES; *DRINKING WATER; *INSPECTION; *EQUIPMENT; *LEAKAGE; *MANUFACTURING; *MAINS; *OPERATIONS (WATER); *RESERVOIRS; *TRAINING; *WATER TREATMENT

DESCRIPTIVE NOTE: C70-C77P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9396). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO SYSTEM MAINTENANCE. INCLUDED ARE DISCUSSIONS OF LEAKAGE, INSTALLING CONNECTIONS, MAINTAINING MAIN CAPACITIES, RESERVOIRS AND WELLS, UNDERWATER INSPECTION, AND CONTRACT OPERATION.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010966

PUBLICATION DATE: 84

TITLE: COLLECTION SYSTEMS.

DESCRIPTOR: *DIRECTORIES; *EQUIPMENT; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *PIPES; *SEWERS; *SEWER PIPES; *WASTEWATER TREATMENT; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: D2-D9P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9397). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS OF COLLECTION SYSTEMS.

TOPICS DISCUSSED INCLUDE CLAY PIPE, CONCRETE PIPE, ASBESTOS-CEMENT PIPE, PLASTIC PIPE AND SEWER APPURTENANCES.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010967

PUBLICATION DATE: 84

TITLE: PUMPS AND VALVES.

DESCRIPTOR: *DIRECTORIES; *EQUIPMENT; *LIFT STATIONS; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *PUMPS; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT; *VALVES

DESCRIPTIVE NOTE: D9-D17P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9398). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO PUMPS AND VALVES FOR WASTEWATER OPERATIONS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010968

PUBLICATION DATE: 84

TITLE: PRIMARY TREATMENT.

DESCRIPTOR: *DIRECTORIES; *EQUIPMENT; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *PRIMARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D17-D24P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9399). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO PRIMARY WASTEWATER TREATMENT. TOPICS DISCUSSED INCLUDE SCREENING, GRIT COLLECTION, SETTLING TANKS, FLOTATION, FLOCCULATION, THICKENERS, AND FACTORY BUILT PLANTS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010969

PUBLICATION DATE: 84

TITLE: SECONDARY TREATMENT.

DESCRIPTOR: *ACTIVATED SLUDGE; *DIRECTORIES; *FACILITIES; *EQUIPMENT; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *OXIDATION PONDS; *SECONDARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D25-D32P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9400). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO SECONDARY WASTEWATER TREATMENT. TOPICS DISCUSSED INCLUDE ACTIVATED SLUDGE AND OXIDATION PONDS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010970

PUBLICATION DATE: 84

TITLE: ADVANCED TREATMENT.

DESCRIPTOR: *ADVANCED TREATMENT; *DIRECTORIES; *FACILITIES; *EQUIPMENT; *LAND APPLICATION; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *TERTIARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D32-D37P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9401). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO ADVANCED WASTEWATER TREATMENT. TOPICS ADDRESSED INCLUDE TERTIARY TREATMENT, PHYSICAL-CHEMICAL TREATMENT, COMPLETE PLANTS, AND LAND APPLICATIONS.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010971

PUBLICATION DATE: 84

TITLE: SLUDGE DIGESTION AND DISPOSAL.

DESCRIPTOR: *DIRECTORIES; *EQUIPMENT; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *SLUDGE; *SLUDGE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D38-D48P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9402). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO SLUDGE DIGESTION AND DISPOSAL. TOPICS ADDRESSED INCLUDE ANAEROBIC DIGESTION, AEROBIC DIGESTION, GAS UTILIZATION, CHEMICAL STABILIZATION, DEWATERING SLUDGE, FILTER CAKE DRYING, AND SLUDGE DISPOSAL.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010972

PUBLICATION DATE: 84

TITLE: DISINFECTION, ODOR PREVENTION AND CONTROL.

DESCRIPTOR: *DIRECTORIES; *DISINFECTION; *EQUIPMENT; *MANUFACTURERS; *ODORS; *ODOR CONTROL; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D48-D51P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9403). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO DISINFECTION, ODOR PREVENTION AND ODOR CONTROL RELATED TO WASTEWATER.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010973

PUBLICATION DATE: 84

TITLE: OPERATION CONTROL.

DESCRIPTOR: *DIRECTORIES; *EQUIPMENT; *MEASUREMENT; *MANUFACTURERS; *OPERATION CONTROL; *OPERATIONS (WASTEWATER); *SAFETY; *SAMPLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D52-D57P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9404). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO OPERATION CONTROL. TOPICS ADDRESSED INCLUDE FLOW MEASUREMENTS, SAMPLING, QUALITY, LABORATORY EQUIPMENT, SAFETY INSTRUMENTATION, AND SUPERVISORY CONTROL.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010974

PUBLICATION DATE: 84

TITLE: SEWER MAINTENANCE AND REHABILITATION.

DESCRIPTOR: *DIRECTORIES; *FACILITIES; *EQUIPMENT; *MAINTENANCE; *MANUFACTURERS; *OPERATIONS (WASTEWATER); *SAFETY; *SEWERS; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D57-D63P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9405). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO SEWER MAINTENANCE AND REHABILITATION.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010975

PUBLICATION DATE: 84

TITLE: CONTRACT OPERATIONS AND MAINTENANCE SERVICES.

DESCRIPTOR: *CONTRACT OPERATIONS; *DIRECTORIES; *FACILITIES; *EQUIPMENT; *MAINTENANCE; *MANUFACTURERS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *QUALITY CONTROL; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: D63-D66P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9406). LISTED IN THIS SECTION ARE DEVELOPERS AND MANUFACTURERS FOR VARIOUS ITEMS RELATED TO CONTRACT OPERATIONS AND MAINTENANCE SERVICES FOR WASTEWATER FACILITIES.

AVAILABILITY: PUBLIC WORKS MANUAL

IRIS ACCESSION NUMBER: EW010976

PUBLICATION DATE: SPR 84

TITLE: A LABORATORY EVALUATION OF GROUND WATER SAMPLING MECHANISMS.

PERSONAL AUTHOR: BARCELONA, J. J.; AND OTHERS

DESCRIPTOR: *CHEMICALS; *GROUNDWATER; *GASES; *GAS-SENSITIVE CHEMICALS; *LABORATORY PROCEDURES; *EQUIPMENT; *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *SAMPLING; *SAMPLING DEVICES; *SAMPLING MECHANISMS

DESCRIPTIVE NOTE: 32-41P.

ABSTRACT: THIS STUDY HAD AS ITS PRIMARY GOAL THE IDENTIFICATION OF RELIABLE SAMPLING MECHANISMS FOR PURGEABLE ORGANIC COMPOUNDS AND GAS-SENSITIVE CHEMICAL PARAMETERS IN GROUND WATER. FOURTEEN COMMERCIAL SAMPLING DEVICES WERE EVALUATED. RESULTS ARE REPORTED.

AVAILABILITY: GROUND WATER MONITORING; V4 N2

IRIS ACCESSION NUMBER: EW010977

PUBLICATION DATE: SPR 84

TITLE: ALTERNATIVES FOR HANDLING DETECTION LIMIT DATA IN IMPACT ASSESSMENTS.

PERSONAL AUTHOR: MCBEAN, EDWARD A.; ROVERS, FRANK A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DATA ANALYSIS; *GROUNDWATER; *IMPACT ASSESSMENTS; *RECOMMENDATIONS; *STATISTICS

DESCRIPTIVE NOTE: 42-44P.

ABSTRACT: THE INTENT OF THIS ARTICLE IS TO SUGGEST THREE PROCEDURES FOR SELECTING QUANTIFIED VALUES FOR STATISTICAL TESTS WHEN "LESS THAN" VALUES HAVE BEEN OBTAINED IN DETECTION STUDIES FOR IMPACT ASSESSMENTS. EXAMPLES ARE PROVIDED.

AVAILABILITY: GROUND WATER MONITORING; V4 N2

IRIS ACCESSION NUMBER: EW010978

PUBLICATION DATE: SPR 84

TITLE: AN OVERVIEW OF COMPUTER TECHNOLOGY USED IN GROUND WATER FIELD STUDIES PART TWO: APPLICATIONS.

PERSONAL AUTHOR: RITCHEY, JOSEPH D.; COLLINS, MARK A.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTERS; *GROUNDWATER; *ENVIRONMENT; *FIELD STUDIES; *POWER SUPPLIES; *RECOMMENDATIONS; *SECURITY

DESCRIPTIVE NOTE: 51-55P.

ABSTRACT: THIS IS PART TWO IN A TWO PART SERIES. IN THIS PART SEVERAL TOPICS ARE PRESENTED RELATED TO FIELD STUDIES. THESE INCLUDE PROTECTION FROM THE ENVIRONMENT AND INTRUDERS AND POWER SUPPLY CONCERNS. TWO APPLICATIONS USING COMPUTERS ARE INCLUDED.

AVAILABILITY: GROUND WATER MONITORING; V4 N2

IRIS ACCESSION NUMBER: EW010979

PUBLICATION DATE: MAR 84

TITLE: ESTIMATING MEANS AND VARIANCES: THE COMPARATIVE EFFICIENCY OF COMPOSITE AND GRAB SAMPLES.

PERSONAL AUTHOR: BRUMELLE, S.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COMPOSITE SAMPLING; *GRAB SAMPLING; *MONITORING; *SAMPLING; *STATISTICS

DESCRIPTIVE NOTE: 81-84P.

ABSTRACT: THIS PAPER COMPARES THE EFFICIENCIES OF TWO SAMPLING TECHNIQUES FOR ESTIMATING A POPULATION MEAN AND VARIANCE. PROCEDURES DISCUSSED ARE GRAB SAMPLING AND COMPOSITE SAMPLING.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V4 N1

IRIS ACCESSION NUMBER: EW010980

PUBLICATION DATE: APR 84

TITLE: HOW THE YEMEN IS TRYING TO MEET THE AIMS OF THE

WATER DECADE.

PERSONAL AUTHOR: MERABET, ZOHRA

DESCRIPTOR: *DEVELOPMENT PROGRAMS; *DRINKING WATER; *PUBLIC HEALTH; *WATER SUPPLY; *WATER RESOURCES; *WATER QUALITY; *WATER DISTRIBUTION; *YEMEN

DESCRIPTIVE NOTE: 7-12P.

ABSTRACT: DESCRIBED ARE EFFORTS IN YEMENTO IMPROVE ITS WATER SUPPLY AND DRINKING WATER FACILITIES. IT IS ESTIMATED THAT AT THE CURRENT TIME 50 PERCENT OF THE URBAN POPULATION AND 14 PERCENT OF THE RURAL POPULATION ARE SERVED BY SAFE DRINKING WATER.

AVAILABILITY: WATERLINES; V2 N4

IRIS ACCESSION NUMBER: EW010981

PUBLICATION DATE: APR 84

TITLE: RAINWATER CATCHMENT SYSTEMS IN BOTSWANA: PRESENT, PAST AND FUTURE.

PERSONAL AUTHOR: GOULD, JOHN

DESCRIPTOR: *BOTSWANA; *CATCHMENT SYSTEMS; *FEASIBILITY STUDIES; *RAINWATER; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 14-19P.

ABSTRACT: DESCRIBED ARE RAINWATER CATCHMENT SYSTEMS IN BOTSWANA.

AVAILABILITY: WATERLINES; V2 N4

IRIS ACCESSION NUMBER: EW010982

PUBLICATION DATE: APR 84

TITLE: TALKING TO THE PEOPLE--A MULTIDISCIPLINARY APPROACH TO DRILLING BOREHOLES IN SENEGAL.

PERSONAL AUTHOR: SUNMAN, HILARY

DESCRIPTOR: *DRILLING; *DRINKING WATER; *SENEGAL; *WATER RESOURCES; *WATER SUPPLY; *WELLS

DESCRIPTIVE NOTE: 20-23P.

ABSTRACT: DESCRIBED IS A PROGRAM IN SENEGAL FOR DRILLING BOREHOLES TO OBTAIN WATER SUPPLIES.

AVAILABILITY: WATERLINES; V2 N4

IRIS ACCESSION NUMBER: EW010983

PUBLICATION DATE: APR 84

TITLE: USING OFF-SET HANDPUMPS--A COST-EFFECTIVE METHOD TO PROTECT DRINKING WATER IN RURAL VILLAGES.

PERSONAL AUTHOR: JENKINS, DANIEL

DESCRIPTOR: *COSTS; *DRINKING WATER; *HANDPUMPS; *PUBLIC HEALTH; *PUMPS; *RURAL AREAS; *WATER SUPPLY

DESCRIPTIVE NOTE: 25-26P.

ABSTRACT: DESCRIBED IS THE USE OF OFF-SET HAND PUMPS FOR PUMPING WATER IN RURAL SETTINGS. ADVANTAGES AND DISADVANTAGES ARE LISTED.

AVAILABILITY: WATERLINES; V2 N4

IRIS ACCESSION NUMBER: EW010984

PUBLICATION DATE: APR 84

TITLE: THE FALAJ: MODERN PROBLEMS AND SOME POSSIBLE SOLUTIONS.

PERSONAL AUTHOR: BIRKS, J. S.

DESCRIPTOR: *AGRICULTURE; *FALAJES; *IRRIGATION; *COSTS; *MAINTENANCE; *OMAN; *RECOMMENDATIONS; *WATER DISTRIBUTION; *WATER RESOURCES; *WATER SUPPLY; *WATER PROBLEMS

DESCRIPTIVE NOTE: 28-31P.

ABSTRACT: DESCRIBED IS THE FALAJ AND SOME PROBLEMS AND POSSIBLE SOLUTIONS ASSOCIATED WITH THEM. MAINTENANCE ON THE TUNNELS AND EXTENSION OF THE TUNNELS TO ADDITIONAL SPRINGS ARE NEEDED. INCREASED REVENUE IS NEEDED TO PROTECT THE FALAJ-IRRIGATION SYSTEMS. POSSIBLE SOLUTIONS ARE DISCUSSED.

AVAILABILITY: WATERLINES; V2 N4

IRIS ACCESSION NUMBER: EW010985

PUBLICATION DATE: APR 84

TITLE: WHAT A FIRST-TIME PROGRAM PURCHASER SHOULD KNOW.

PERSONAL AUTHOR: BRAGA, JOYCE A.

DESCRIPTOR: *AUDIOVISUAL AIDS; *INSTRUCTION; *INSTRUCTIONAL MATERIALS; *NEEDS ASSESSMENT; *PLANNING; *PURCHASING; *TELECOURSES; *VIDEO INSTRUCTION

DESCRIPTIVE NOTE: 40-42P.

ABSTRACT: BEFORE BUYING VIDEO PROGRAMMING FOR INSTRUCTIONAL USE THERE ARE SOME THINGS THAT SHOULD BE DONE. THIS ARTICLE PROVIDES THE ADVICE OF A PERSON RESPONSIBLE FOR DISTRIBUTION

OF MATERIALS. SUGGESTIONS INCLUDE (1) GETTING ADVICE FROM DISTRIBUTORS; (2) CONDUCTING A NEEDS ASSESSMENT; AND (3) SELLING THE IDEA TO YOUR ADMINISTRATION.

AVAILABILITY: E-I TV; V16 N4

IRIS ACCESSION NUMBER: EW010986

PUBLICATION DATE: APR 84

TITLE: HOW TO BECOME AN IP FOR EDUCATIONAL VIDEOTEX.

PERSONAL AUTHOR: NUGENT, GWEN C.; PETERS, P. J.

DESCRIPTOR: *AUDIOVISUAL AIDS; *COSTS; *EDUCATIONAL VIDEOTEX; *FRAME DEVELOPMENT; *INSTRUCTIONAL DESIGN; *INSTRUCTIONAL MATERIALS; *PLANNING; *PROGRAMMING; *TIME; *VIDEOTEX

DESCRIPTIVE NOTE: 43-57P.

ABSTRACT: BECOMING AN INFORMATION PROVIDER FOR AN EDUCATIONAL VIDEOTEX SYSTEM REQUIRES PEOPLE, EQUIPMENT, AND TIME. THIS ARTICLE CONSIDERS THESE THREE ITEMS WITH SPECIAL EMPHASIS ON TIME ESTIMATES. TIME ESTIMATES ARE GIVEN FOR INSTRUCTIONAL DESIGN, PROGRAMMING, FRAME DEVELOPMENT, AND TOTAL DEVELOPMENT TIME.

AVAILABILITY: E-I TV; V16 N4

IRIS ACCESSION NUMBER: EW010987

PUBLICATION DATE: APR 84

TITLE: PUT YOUR IN-HOUSE PLAYBACK ON AUTOMATIC.

PERSONAL AUTHOR: WIRTALA, JOE

DESCRIPTOR: *AUDIOVISUAL AIDS; *AUTOMATIC CONTROLS; *AUTOMATION; *CHANNEL AUTOMATION; *PROGRAM PLAYBACKS; *SWITCHES; *TELEVISION; *VIDEOTAPE

DESCRIPTIVE NOTE: 48-50P.

ABSTRACT: TWO SIMPLE SWITCHES WILL PERMIT YOU TO GET AWAY FROM THE BY-HAND PLAYBACK SCHEDULE DIFFICULTY. THIS ARTICLE DESCRIBES HOW TO AUTOMATE VIDEOTAPE PLAYBACK.

AVAILABILITY: E-I TV; V16 N4

IRIS ACCESSION NUMBER: EW010988

PUBLICATION DATE: APR 84

TITLE: PRODUCING A SUCCESSFUL TELECONFERENCE.

PERSONAL AUTHOR: SPATARO, ANTHONY

DESCRIPTOR: *CONFERENCES; *INSTRUCTION; *MEETINGS; *PLANNING; *RECOMMENDATIONS; *TELECONFERENCES

DESCRIPTIVE NOTE: 88,90P.

ABSTRACT: THIS ARTICLE DESCRIBES HOW TO HOLD A SUCCESSFUL TELECONFERENCE.

AVAILABILITY: E-I TV; V16 N4

IRIS ACCESSION NUMBER: EW010989

PUBLICATION DATE: APR 84

TITLE: NORTHEASTERN BEAMS CONTINUING EDUCATION TO ENGINEERS.

DESCRIPTOR: *CONTINUING EDUCATION; *ENGINEERING EDUCATION; *ENGINEERS; *HIGHER EDUCATION; *INSTRUCTIONAL TELEVISION; *INDUSTRY; *MASSACHUSETTS; *TELEVISED INSTRUCTION

DESCRIPTIVE NOTE: 106-107P.

ABSTRACT: DESCRIBED IS HOW NORTHEASTERN UNIVERSITY IN BOSTON USES ITS INSTRUCTIONAL TELEVISION CHANNELS TO SERVE COMPANIES IN ITS AREA. EXAMPLES USED RELATE TO ENGINEERING EDUCATION.

AVAILABILITY: E-I TV; V16 N4

IRIS ACCESSION NUMBER: EW010990

PUBLICATION DATE: OCT 83

TITLE: DEVELOPMENT OF STANDARD PROCEDURES FOR EVALUATING OXYGEN TRANSFER DEVICES.

PERSONAL AUTHOR: BOYLE, W. C.

DESCRIPTOR: *AERATION; *ANALYTICAL PROCEDURES; *OXYGEN; *OXYGEN TRANSFER DEVICES; *STANDARDS; *TESTING; *WATER QUALITY

DESCRIPTIVE NOTE: 317P. PRICE CODE: PC A14/MF A01; PB84-148394

ABSTRACT: IN AN EFFORT TO OBTAIN CONSENSUS STANDARDS FOR THE EVALUATION OF AERATION DEVICES IN BOTH CLEAN AND DIRTY WATER, THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) ESTABLISHED A SUBCOMMITTEE ON OXYGEN TRANSFER STANDARDS IN JANUARY 1977. THE OBJECTIVES OF THE SUBCOMMITTEE WERE TO REVIEW AND CRITICALLY EVALUATE THE STATE-OF-THE-ART OF OXYGEN TRANSFER TESTING, EVALUATE AND CRITICALLY REVIEW EXISTING STANDARDS AND IDENTIFY CRITICAL AREAS OF DISAGREEMENT AND UNCERTAINTY, DEVELOP DOCUMENTATION FOR RECOMMENDATIONS FOR INTERIM STANDARDS AND RECOMMENDED VERIFICATION METHODOLOGY, AND PREPARE THESE STANDARDS AND SUBMIT THEM FOR ASCE CONSENSUS EVALUATION. THIS REPORT PRESENTS THE OUTCOME OF THIS REVIEW PROCESS AND PROVIDES RECOMMENDED PROCEDURES FOR TESTING OF OXYGEN TRANSFER

DEVICES IN BOTH CLEAN AND DIRTY WATER.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010991

PUBLICATION DATE: SEP 83

TITLE: GROUND WATER MANAGEMENT IN THE SOUTHEASTERN UNITED STATES.

PERSONAL AUTHOR: DEVINE, M. D.; AND OTHERS

DESCRIPTOR: *CASE STUDIES; *GROUNDWATER; *ENVIRONMENT; *HAZARDOUS WASTES; *MANAGEMENT; *PUBLIC HEALTH; *POLLUTION; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 533P. PRICE CODE: PC A23/MF A01; PB84-152768

ABSTRACT: THIS STUDY CHARACTERIZES CURRENT AND POTENTIAL GROUND-WATER RESOURCE PROBLEMS IN NORTH AND SOUTH CAROLINA, GEORGIA, FLORIDA, ALABAMA, MISSISSIPPI, TENNESSEE, AND KENTUCKY. IT DISCUSSES THOSE ISSUES THAT COULD CONSTRAIN DEVELOPMENT OR ADVERSELY AFFECT ENVIRONMENTAL QUALITY OR HUMAN HEALTH IN THE EIGHT-STATE AREA. IT CONTAINS CASE STUDIES ILLUSTRATING HOW SEVERAL STATE AND LOCAL GOVERNMENTS ARE DEALING WITH GROUNDWATER PROBLEMS AND ASSESSES THE APPLICABILITY OF THESE EXPERIENCES TO OTHER AREAS. IT ADDRESSES GROUND-WATER QUALITY IN RELATION TO HAZARDOUS WASTE DISPOSAL, NONPOINT SOURCE POLLUTION, MONITORING STRATEGIES AND DEFICIENCIES, AND DRINKING WATER QUALITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010992

PUBLICATION DATE: JAN 84

TITLE: IMPROVED TECHNIQUES FOR RESIDUAL OZONE.

PERSONAL AUTHOR: GORDON, G.; GRUNWELL, F. G.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DISINFECTION; *EVALUATION; *LABORATORY PROCEDURES; *OZONE; *PERFORMANCE EVALUATION; *RESIDUAL OZONE; *WATER TREATMENT

DESCRIPTIVE NOTE: 90P. PRICE CODE: PC A05/MF A01; PB84-151224

ABSTRACT: EIGHT ANALYTICAL METHODS FOR THE DETERMINATION OF RESIDUAL OZONE IN WATER ARE EVALUATED. FOUR ARE IODOMETRIC METHODS BASED ON THE REDUCTION OF OZONE BY IODIDE ION: THE IODOMETRIC METHOD, THE AMPEROMETRIC METHOD, THE ARSENIC (III) BACK TITRATION METHOD, AND THE N, N-DIETHYL-P-PHENYLENEDIAMINE (DPD) METHOD. FOUR ARE NON-IODOMETRIC METHODS: THE INDIGO METHOD, THE ARSENIC (222) DIRECT OXIDATION METHOD, THE DELTA ELECTRODE, AND THE DIRECT MEASUREMENT OF ULTRAVIOLET ABSORPTION AT 259 NM. TWO OR MORE ANALYTICAL METHODS ARE COMPARED BY SIMULTANEOUS MEASUREMENT OF THE DECAY CURVE OF OZONE IN WATER. THIS KINETIC TECHNIQUE ALLOWS A DIRECT COMPARISON OF METHODS UNDER CONDITIONS OF RAPIDLY CHANGING OZONE CONCENTRATION. THE MECHANISM OF OZONE DECAY IS DISCUSSED. FOUR EXPLORATORY METHODS BASED ON NEW OZONE-REDUCTANT REACTIONS ARE DISCUSSED: THE CHLORITE ION METHOD, THE IODATE METHOD, THE IRON (II) TERPYRIDINE METHOD, AND THE CERIUM METHOD. THE FAILURE OF THESE POTENTIAL NEW METHODS IS TRACED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010993

PUBLICATION DATE: JAN 84

TITLE: ION EXCHANGE RESINS. FEBRUARY, 1983-JANUARY, 1984. (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *CHEMICAL ANALYSIS; *ION EXCHANGE RESINS; *PERFORMANCE EVALUATION; *RESEARCH; *SEPARATION PROCESSES; *WASTE TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 56P. PRICE CODE: PC N01/MF N01; PB84-85[illegible]081

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE PREPARATION AND APPLICATIONS OF ION EXCHANGE RESINS. THEIR UTILIZATION AS CATALYSTS AND IN TREATMENT OF WATER AND WASTES, CHEMICAL ANALYSIS AND REACTIONS, NUCLEAR FUELS AND REACTORS, AND IN VARIOUS RECOVERY, PURIFICATION, AND SEPARATION PROCESSES ARE DISCUSSED. PERFORMANCE EVALUATIONS ARE ALSO INCLUDED RELATIVE TO AIR PURIFICATION PROCESSES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 54 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010994

PUBLICATION DATE: JAN 84

TITLE: REFERENCE MATERIALS FOR WATER AND WASTEWATER ANALYSES IN USEPA (U. S. ENVIRONMENTAL PROTECTION AGENCY).

PERSONAL AUTHOR: WINTER, J. A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *USEPA; *LABORATORY PROCEDURES; *LABORATORY TESTS; *REFERENCE VALUES; *REFERENCE MATERIALS; *SAMPLES; *STANDARDS; *WATER QUALITY; *WATER ANALYSES; *WASTEWATER ANALYSES

DESCRIPTIVE NOTE: 24P. PRICE CODE: PC A02/MF A01; PB84-149277

ABSTRACT: THE ENVIRONMENTAL MONITORING AND SUPPORT

LABORATORY AT CINCINNATI PROVIDES QUALITY ASSURANCE SUPPORT FOR EPA'S WATER-RELATED PROGRAMS IN RESPONSE TO THE CLEAN WATER ACT, THE SAFE DRINKING WATER ACT, THE MARINE PROTECTION RESEARCH AND SANCTUARIES ACT, THE RESOURCES CONSERVATION AND RECOVERY ACT, THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT, AND THE TOXIC SUBSTANCES CONTROL ACT. TWO IMPORTANT SEGMENTS OF THIS SUPPORT ARE: (1) THE QUALITY CONTROL (QC) SAMPLE PROGRAM WHICH PROVIDES SAMPLES OF KNOWN CONCENTRATIONS FOR USE AS INDEPENDENT HAZARDOUS MATERIALS WHICH PROVIDES CALIBRATION STANDARDS FOR TRACE ORGANIC ANALYSES OF INTEREST TO THE AGENCY. THE SAMPLES AND STANDARDS ARE PREPARED AS STABLE CONCENTRATED SOLUTIONS IN ALL GLASS AMPULS. EACH SERIES CONTAINS ONE OR MORE RELATED ANALYSES, EACH WITH A TRUE OR REFERENCE VALUE. THESE ARE PROVIDED FOR DILUTION TO VOLUME AND ANALYSES AS NEEDED BY EPA, EPA CONTRACTOR/GRANTEES, AND OTHER FEDERAL, STATE AND LOCAL AGENCIES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010995

PUBLICATION DATE: FEB 84

TITLE: SIMULATION MODEL FOR WATERSHED MANAGEMENT PLANNING. VOLUME 1. MODEL THEORY AND FORMULATION.

PERSONAL AUTHOR: SIMONS, D. B.; AND OTHERS

DESCRIPTOR: *LAND USE; *MANAGEMENT; *MODELS; *NONPOINT SOURCE POLLUTION; *PLANNING; *SIMULATION MODELS; *WATER QUALITY; *WATERSHEDS

DESCRIPTIVE NOTE: 211P. PRICE CODE: PC A10/MF A01; PB84-158153

ABSTRACT: EVALUATION OF NONPOINT SOURCE POLLUTION PROBLEMS REQUIRES AN UNDERSTANDING OF THE BEHAVIORAL RESPONSE OF AN ECOSYSTEM TO THE IMPACTS OF LAND USE ACTIVITIES ON INDIVIDUAL COMPONENTS OF THAT ECOSYSTEM. BY ANALYZING BASIC ECOSYSTEM PROCESSES AND IMPACTS OF LAND USE ACTIVITIES ON SPECIFIC FACTORS COVERNING PRODUCTION AND TRANSPORT OF NONPOINT SOURCE POLLUTION, IT IS POSSIBLE TO PREDICT CAUSE-EFFECT RELATIONSHIPS BETWEEN THESE ACTIVITIES AND WATER QUALITY. TO FACILITATE THESE PREDICTIONS, A SIMULATION MODEL FOR EVALUATION OF ALTERNATIVE AGRICULTURAL AND SILVICULTURAL PRACTICES AS A FUNCTION OF BOTH ENVIRONMENTAL AND MANAGEMENT PARAMETERS WAS DEVELOPED. NONPOINT SOURCE POLLUTION FROM THESE ACTIVITIES AND EVENTS MAY INCLUDE LOADING OF STREAMS BY: SEDIMENT FROM SURFACE EROSION, MASS WASTING, CHANNEL BOTTOM AND BANK EROSION; THERMAL ENERGY; BIOLOGICAL OXYGEN DEMANDING CONTAMINANTS; ORGANIC DEBRIS; NUTRIENTS AND DISSOLVED SOLIDS; PESTICIDES; AND OTHER WASTE MATERIALS EITHER IN SOLUTION OR ADSORBED TO SEDIMENTS. THE MODEL CONSISTS OF A SOIL-PLANT-ATMOSPHERIC WATER COMPONENT FOR ADJUSTING SOIL MOISTURE AS A FUNCTION OF EVAPORATION, EVAPOTRANSPIRATION, SOIL-WATER HYDRAULICS, AND SNOWMELT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010996

PUBLICATION DATE: FEB 84

TITLE: SIMULATION MODEL FOR WATERSHED MANAGEMENT PLANNING. VOLUME 2. MODEL USER MANUAL.

PERSONAL AUTHOR: SIMONS, D. B.; AND OTHERS

DESCRIPTOR: *FARMING; *FORESTRY; *MANAGEMENT; *MODELS; *NONPOINT SOURCE POLLUTION; *PLANNING; *SIMULATION MODELS; *USER MANUALS; *WATERSHEDS

DESCRIPTIVE NOTE: 407P. PRICE CODE: PC A18/MF A01; PB84-158161

ABSTRACT: THIS REPORT PROVIDES A USER MANUAL FOR THE HYDROLOGIC, NONPOINT SOURCE POLLUTION SIMULATION OF THE GENERALIZED PLANNING MODEL FOR EVALUATING FOREST AND FARMING MANAGEMENT ALTERNATIVES. THE MANUAL CONTAINS AN EXPLANATION OF APPLICATION OF SPECIFIC CODE AND INDICATES CHANGES THAT SHOULD BE CONSIDERED WHEN APPLYING THE SIMULATION TO DIFFERENT WATERSHEDS. TWO EXAMPLE APPLICATIONS OF THE MODEL ARE INCLUDED TO ILLUSTRATE MODEL SENSITIVITY TO MANAGEMENT ALTERNATIVES. A TIMBER HARVEST EXAMPLE COMPOSES THE UNDISTURBED WATERSHED WITH CLEAR-CUT LOGGING WITH BALLOON, HIGH LEAD, AND TRACTOR TRANSPORT. A GRAZING ACTIVITY EXAMPLE COMPARES ROTATION AND HEAVY CONTINUOUS GRAZING ALTERNATIVES. THE MANUAL APPENDICES CONTAIN ALL PROGRAM LISTINGS AND JOB CONTROL LANGUAGE FOR THE CDC CYBER 172.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010997

PUBLICATION DATE: JAN 84

TITLE: SUMMARY OF ON-SCENE-COORDINATOR PROTOCOL FOR CONTAMINATED UNDERWATER OPERATIONS.

PERSONAL AUTHOR: TRAVER, R. P.

DESCRIPTOR: *CONTAMINATION; EPA; *DIVING EQUIPMENT; *METHODS; NOAA; *PROCEDURES; *POLLUTION; *PROTOCOLS; *POLLUTION CONTROL; *TRAINING; *UNDERWATER OPERATIONS; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 19P. PRICE CODE: PC A02/MF A01; PB84-149707

ABSTRACT: THE EPA, RECOGNIZING THE NEED TO ASSESS, MODIFY, AND EVALUATE PROCEDURES AND EQUIPMENT APPLICABLE TO WORKING IN CONTAMINATED UNDERWATER ENVIRONMENTS, ENTERED INTO AN INTERAGENCY AGREEMENT WITH NOAA. AS PART OF THIS WORK, AN 'INTERIM PROTOCOL ON UNDERWATER OPERATIONS' WAS DEVELOPED AND IS THE SUBJECT OF THIS PAPER. THE PROTOCOL WAS BASED UPON PRELIMINARY FIELD EVALUATIONS OF DIVING EQUIPMENT IN CONTROLLED CHEMICAL UNDERWATER ENVIRONMENTS. FOLLOWING A PEER REVIEW OF THE DOCUMENT BY THE USER COMMUNITY, THE METHODS, PROCEDURES, EQUIPMENT, AND TRAINING WILL BE APPLIED AT A NUMBER OF SITES OR SPILLS OF OPPORTUNITIES. THE

RESULTING INFORMATION WILL BE UTILIZED TO PREPARE A 'MANUAL OF PRACTICE (MOP) ON UNDERWATER OPERATIONS IN CONTAMINATED WATERS.' THE FINAL MOP IS SCHEDULED FOR PUBLICATION IN DECEMBER 1984.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010998

PUBLICATION DATE: FEB 84

TITLE: WASTE MANAGEMENT CONTROL HANDBOOK FOR DAIRY FOOD PLANTS.

PERSONAL AUTHOR: HARPER, W. J.; AND OTHERS

DESCRIPTOR: *DAIRY INDUSTRY; *FOODS; *HANDBOOKS; *INDUSTRIAL WASTES; *MANAGEMENT; *WASTE CONTROL; *WASTE MANAGEMENT

DESCRIPTIVE NOTE: 244P. PRICE CODE: PC A11/MF A01; PB84-152826

ABSTRACT: WASTE CONTROL IS RESOURCE MANAGEMENT CONTROL IN DAIRY FOOD PLANT OPERATIONS. APPRECIABLE REDUCTIONS CAN BE ACHIEVED IN PRODUCT, WATER, ENERGY, LABOR, PACKAGING LOSSES AND SEWER SURCHARGES. A GOOD PROGRAM IN WASTE CONTROL CAN INCREASE THE PROFIT MARGIN BY MORE THAN 10%, AS WELL AS BEING A PROGRAM THAT HELPS IMPROVE THE ENVIRONMENT IN WHICH WE LIVE. ANOTHER RESULT OF THE OPERATION OF AN EFFECTIVE WASTE PROGRAM IS TO INCREASE THE OVERALL EFFICIENCY OF A DAIRY FOOD PLANT. WASTE CONTROL SHOULD BE RECOGNIZED AS BEING EQUAL IN SIGNIFICANCE TO QUALITY CONTROL AND JUSTIFIES THE ASSIGNMENT OF ONE OR MORE INDIVIDUALS TO THE WASTE CONTROL PROGRAM WITH RESULTING ECONOMIC GAIN TO THE DAIRY FOOD PLANT. THIS HANDBOOK IS PREDICATED ON THE VIEWPOINT THAT AN EFFECTIVE CONTROL PROGRAM REQUIRES THE FULL ATTENTION OF A RESPONSIBLE PERSON REPORTING DIRECTLY TO THE PLANT MANAGER. DETAILS ARE PRESENTED IN THIS MANUAL ON THE IMPLEMENTATION OF THIS STRATEGY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW010999

PUBLICATION DATE: SEP 82

TITLE: RAIN CATCHMENT AND WATER SUPPLY IN RURAL AFRICA: A MANUAL.

PERSONAL AUTHOR: NISSEN-PETERSON, ERIK

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *AFRICA; *CATCHMENT AREAS; *CONSTRUCTION; *DESIGN; *FACILITIES; *RESERVOIRS; *RURAL AREAS; *WATER RESOURCES; *WATER SUPPLY; *WELLS

DESCRIPTIVE NOTE: 96P. PRICE: $2.50

ABSTRACT: THIS BOOK IS DESIGNED TO HELP PEOPLE IN RURAL AFRICA MAKE MAXIMUM USE OF THEIR WATER RESOURCES WITHOUT THE USE OF SOPHISTICATED TECHNOLOGY. THE TEXT INCLUDES SECTIONS ON (1) WATER REQUIREMENTS, (2) THE SOURCE OF WATER, (3) CATCHMENT AREAS, (4) STORAGE TANKS AND RESERVOIRS, (5) WELLS, (6) DESIGN, AND (7) BIBLIOGRAPHY.

AVAILABILITY: HODDER & STOUGHTON, MILL ROAD, DUNTON GREENS, SEVENOAKS, KENT TN13 2YD ENGLAND

IRIS ACCESSION NUMBER: EW011000

PUBLICATION DATE: SEP 83

TITLE: LEACHATE: FROM HAZARDOUS WASTES SITES.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.; GIGLIELLO, KENNETH A.

DESCRIPTOR: *GROUNDWATER; *LABORATORY PROCEDURES; *LEACHATE; *LEACHATE DAMAGE; *LAND USE; *MONITORING; *POLLUTION; *SAMPLING; *SOLID WASTES; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 92P. PRICE: $18.00

ABSTRACT: THIS REPORT HAS BEEN PREPARED AS A GUIDE IN THE FORMATION, GENERATION, SAMPLING METHODOLOGY, CONTROL AND TREATMENT OF LEACHATE FROM SOLID WASTE SITES. SECTIONS ARE INCLUDED ON (1) LEACHATE FORMATION, GENERATION, AND CHARACTERISTICS, (2) LEACHATE SAMPLING, (3) LEACHATE TESTING, (4) LEACHATE CONTROL AND TREATMENT, AND (5) LEACHATE DAMAGE.

AVAILABILITY: TECHNOMIC PUBLISHING COMPANY, INC., 851 NEW HOLLAND AVE., BOX 3535, LANCASTER, PA 17604

IRIS ACCESSION NUMBER: EW011001

PUBLICATION DATE: 84

TITLE: SEPTIC TANKS AND AQUA-PRIVIES FROM FERROCEMENT.

PERSONAL AUTHOR: WATT, S. B.

DESCRIPTOR: *CONSTRUCTION; *COSTS; *DESIGN; *FERROCEMENT; *FACILITIES; *ONSITE WASTEWATER DESPOSAL; *SANITATION; *SEPTIC TANKS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 108P. PRICE: $4.95

ABSTRACT: THIS PUBLICATION IS WRITTEN FOR PUBLIC HEALTH ENGINEERS, PLANNERS AND FIELD WORKERS ENGAGED IN IMPROVING SANITATION. THE MATERIAL HAS BEEN PRESENTED IN SIMPLE, NON-TECHNICAL LANGUAGE. THE BOOK IS DIVIDED INTO FOUR CHAPTERS. CHAPTER 1 DESCRIBES THE POTENTIAL OF FERROCEMENT AS A CONSTRUCTION MATERIAL, AND THE PROBLEMS OF DESIGN IN SEPTIC TANK AND AQUA-PRIVY SYSTEMS. IN CHAPTER 2 THE VARIOUS TECHNICAL OPTIONS IN LOW-COST SANITATION ARE CONTRASTED AND

COMPARED. CHAPTER 3 GIVES DETAILS OF HOW SEPTIC TANK AND AQUA-PRIVY WASTE TREATMENT AND SOIL DISPOSAL SYSTEMS ARE DESIGNED AND CONSTRUCTED, AND CHAPTER 4 GIVES STEP BY STEP CONSTRUCTION DETAILS OF A FERROCEMENT SEPTIC TANK BUILT FOR THE COMMERCIAL MARKET.

AVAILABILITY: INTERMEDIATE TECHNOLOGY PUBLICATIONS, LTD., 9 KING STREET, LONDON WC2E 8HW, UNITED KINGDOM

IRIS ACCESSION NUMBER: EW011002

PUBLICATION DATE: 83

TITLE: ASTM STANDARDS ON COMPUTERIZED SYSTEMS.

DESCRIPTOR: *ASTM STANDARDS; *COMPUTERS; *COMPUTERIZED SYSTEMS; *DESIGN; *DOCUMENTATION; *EVALUATION; *LABORATORIES; *LABORATORY SYSTEMS; *STANDARDS; *TURNKEY SYSTEMS

DESCRIPTIVE NOTE: 102P.

ABSTRACT: THIS GUIDE ADDRESSES THOSE PROCEDURES, CONSIDERATIONS, AND DOCUMENTS WHICH ARE NECESSARY FOR SUCCESSFUL COMPUTERIZATION PROJECTS USING DIGITAL COMPUTERS. SECTIONS ARE INCLUDED ON FUNCTIONAL REQUIREMENTS, FUNCTIONAL DESIGN, IMPLEMENTATION DESIGN, SYSTEM EVALUATION, SYSTEM DOCUMENTATION, TURNKEY SYSTEMS, AND CLINICAL LABORATORY.

AVAILABILITY: ASTM, 1916 RACE STREET, PHILADELPHIA, PA 19103

IRIS ACCESSION NUMBER: EW011003

PUBLICATION DATE: MAR 84

TITLE: A PRELIMINARY REPORT TO CONGRESS ON TRAINING FOR OPERATORS OF MUNICIPAL WASTEWATER TREATMENT PLANTS.

DESCRIPTOR: *USEPA; *FEDERAL PROGRAMS; *FEDERAL ROLE; *OPERATOR TRAINING; *REPORTS; *STATE PROGRAMS; *STATE ROLE; *TRAINING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 53P.

ABSTRACT: THIS IS A PRELIMINARY REPORT ON TRAINING FOR OPERATORS OF MUNICIPAL WASTEWATER TREATMENT PLANTS. REPORTED ARE THE HISTORY AND STATUS OF FEDERAL OPERATOR TRAINING PROGRAMS, STATUS OF STATE PROGRAMS, AND TENTATIVE CONCLUSIONS. SEVERAL ATTACHMENTS ARE INCLUDED.

AVAILABILITY: US ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF WATER, WASHINGTON, DC 20460

IRIS ACCESSION NUMBER: EW011004

PUBLICATION DATE: JAN 84

TITLE: WATER DIRECTORY: WHERE TO GET WATER INFORMATION IN NEW MEXICO.

PERSONAL AUTHOR: HARRIS, LINDA G.

DESCRIPTOR: *AGENICES; *DIRECTORIES; *INFORMATION SOURCES; *MANAGEMENT; *NEW MEXICO; *PLANNING; *RESEARCH; *UNIVERSITIES; *WATER RESOURCES

DESCRIPTIVE NOTE: 66P.

ABSTRACT: THIS IS A DIRECTORY TO AGENCIES AND PEOPLE WORKING IN AREAS RELATED TO WATER RESOURCES IN THE STATE OF NEW MEXICO. LISTED ARE AGENCIES AND UNIVERSITIES, AS WELL AS PEOPLE WITH THESE INSTITUTIONS.

AVAILABILITY: NEW MEXICO WATER RESOURCES RESEARCH INSTITUTE, BOX 3167, NEW MEXICO STATE UNIVERSITY, LAS CRUCES, NM 88003

IRIS ACCESSION NUMBER: EW011009

PUBLICATION DATE: FEB 84

TITLE: ARTIFICIAL RECHARGE OF AQUIFERS. 1977-1983. (CITATIONS FROM THE SELECTED WATER RESOURCES DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *AQUIFERS; *ARTIFICIAL RECHARGE; *BIBLIOGRAPHIES; *ENGINEERING; *MANAGEMENT; *GROUNDWATER; *POLLUTION; *RECYCLING; *SITE STUDIES; *WATER RESOURCES; *WATER REUSE

DESCRIPTIVE NOTE: 160P. PRICE CODE: PC N01/MF N01; PB84-859370

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF ARTIFICIAL RECHARGE METHODS TO IMPROVE WATER AVAILABILITY AND WATER QUALITY. TOPICS INCLUDE SITE STUDIES AND EVALUATION, THE USE OF IMPOUNDED FRESH WATER AND TREATED WASTE WATER, THE ROLE OF ARTIFICIAL RECHARGE TECHNIQUES IN GROUND WATER RESOURCE MANAGEMENT, INDIVIDUAL STATE PROGRAMS, CONTAMINANT BEHAVIOR, AND THE ENGINEERING ASPECTS OF UTILIZING SPREADING PONDS AND INJECTION WELLS. LEGAL AND ENVIRONMENTAL CONSIDERATIONS AND THE USE OF COMPUTER SIMULATIONS ARE ALSO TREATED. (CONTAINS 149 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011010

PUBLICATION DATE: FEB 84

TITLE: BIOLOGICALLY MEDIATED CORROSION AND WATER QUALITY DETERIORATION IN DISTRIBUTION SYSTEMS.

**PERSONAL AUTHOR:** O'CONNOR, J. T.; BANERJI, S. K.

**DESCRIPTOR:** *BACTERIA; *CORROSION; *EVALUATION; *MUNICIPAL WATER SYSTEMS; *PIPES; *SURVEYS; *WATER DISTRIBUTION; *WATER QUALITY; *WATER SUPPLY

**DESCRIPTIVE NOTE:** 444P. PRICE CODE: PC A19/MF A01; PB84-157494

**ABSTRACT:** THIS PROJECT WAS DESIGNED TO EVALUATE BIOLOGICALLY MEDIATED CORROSION AND CHANGES IN WATER QUALITY IN MUNICIPAL WATER DISTRIBUTION SYSTEMS. METHODS EMPLOYED INCLUDED A NATIONAL QUESTIONNAIRE SURVEY, ANALYSIS OF FIELD SAMPLES AND LABORATORY STUDIES. THE QUESTIONNAIRE CONFIRMED THE VAST MAJORITY OF ALL UTILITIES SURVEYED HAD WATER QUALITY PROBLEMS RELATED TO THE DISTRIBUTION SYSTEM. ACTUAL ANALYSIS OF SELECTED SAMPLES INDICATED THAT GENERALLY THERE WAS AN INCREASE IN THE NUMBER OF HETEROTROPHIC BACTERIA IN SAMPLES TAKEN FROM LOCATIONS WHERE WATER QUALITY COMPLAINTS WERE NUMEROUS. STUDIES ON STEEL, COPPER AND PVC PIPES SHOWED THAT STEEL PIPES EXHIBITED GREATER SEDIMENT ACCUMULATION, BUT THE NUMBER OF BACTERIA PER UNIT AREA OF PIPE SURFACE WAS ESSENTIALLY THE SAME FOR ALL THREE PIPE SYSTEMS. THE ADDITION OF MICROORGANISMS ISOLATED FROM PIPE LOOP SYSTEMS INCREASED THE RATE OF CORROSION.

**AVAILABILITY:** NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

**IRIS ACCESSION NUMBER:** EW011011

**PUBLICATION DATE:** FEB 84

**TITLE:** ESTUARIAN PLANKTON: ECOLOGY AND ENVIRONMENT. 1977-OCTOBER, 1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

**DESCRIPTOR:** *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *ENVIRONMENT; *ESTUARIAN PLANKTON; *ESTUARIES; *ECOLOGY; *POLLUTION; *RESEARCH; *SEWAGE

**DESCRIPTIVE NOTE:** 166P. PRICE CODE: PC N01/MF N01; PB84-851286

**ABSTRACT:** THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING ECOLOGICAL, BIOLOGICAL, AND ENVIRONMENTAL STUDIES OF ESTUARIAN PLANKTONIC ORGANISMS. TOPICS INCLUDE POLLUTANT UPTAKE AND TRANSPORT, NUTRIENT UPTAKE, POPULATION DYNAMICS, AND THE EFFECTS OF SEWAGE DISPOSAL LOADING OF ESTUARIES. NITROGEN DYNAMICS AND TRACE METAL TRANSPORT BY ESTUARIAN PLANKTON ARE ALSO CONSIDERED. (CONTAINS 156 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

**AVAILABILITY:** NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

**IRIS ACCESSION NUMBER:** EW011012

**PUBLICATION DATE:** FEB 84

**TITLE:** GROUNDWATER POLLUTION MONITORING. 1976-JANUARY, 1984 (CITATIONS FROM THE ENERGY DATA BASE).

**DESCRIPTOR:** *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *GROUNDWATER; *MONITORING; *POLLUTION; *REGULATIONS; *STANDARDS; *WATER QUALITY; *WATER TREATMENT; *WASTEWATER TREATMENT

**DESCRIPTIVE NOTE:** 154P. PRICE CODE: PC N01/MF N01; PB84-860022

**ABSTRACT:** THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE MONITORING OF VARIOUS GROUNDWATER POLLUTANTS. TOPICS INCLUDE WASTEWATER TREATMENT, WATER POLLUTION SOURCES AND CONTROL, WATER QUALITY STANDARDS, AND GROUNDWATER MOVEMENT. MONITORING METHODS, CONTAMINATION MIGRATION, AND POLLUTION REGULATIONS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 153 CITATIONS, 55 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

**AVAILABILITY:** NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

**IRIS ACCESSION NUMBER:** EW011013

**PUBLICATION DATE:** OCT 83

**TITLE:** SURFACE WATER MANAGEMENT: FINANCING LOCAL MANAGEMENT PROGRAMS.

**PERSONAL AUTHOR:** JOUSEAU, M.

**DESCRIPTOR:** *COSTS; *DRAINAGE; *FINANCES; *FINANCING MECHANISMS; *FLOOD PROTECTION; *MANAGEMENT; *SURFACE WATER; *WATER QUALITY; *WATER RESOURCES

**DESCRIPTIVE NOTE:** 43P. PRICE CODE: PC A03/MF A01; PB84-156694

**ABSTRACT:** IN DECIDING WHICH FINANCING SCHEME SHOULD BE USED FOR SURFACE WATER MANAGEMENT, THE GOVERNMENTAL UNITS AND WATERSHED ORGANIZATIONS MUST DETERMINE WHO SHOULD BEAR THE BURDEN OF PAYMENT: THOSE WHO BENEFIT FROM IMPROVED DRAINAGE, BETTER FLOOD PROTECTION AND BETTER WATER QUALITY, OR THOSE WHO CONTRIBUTE TO THE PROBLEMS, OR SOME MIX OF EACH. THOSE ASSESSING COSTS SHOULD BE CAREFUL TO ANALYZE THE IMPACT OF THE FINANCING SCHEME ON THE INDIVIDUALS OR CLASSES OF INDIVIDUALS AND TO DETERMINE WHETHER THE SCHEME IS EQUITABLE AND EFFICIENT. THIS REPORT EXAMINES BRIEFLY THE STEPS THAT MUST BE ADDRESSED IN THE FINANCIAL ANALYSIS WHEN DEVELOPING A SURFACE WATER MANAGEMENT PROGRAM. THE REPORT DEALS WITH THREE AREAS OF PARTICULAR IMPORTANCE: FINANCING PRINCIPLES, SOURCES OF EXPENDITURES, AND POTENTIAL FINANCING MECHANISMS.

**AVAILABILITY:** NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011014

PUBLICATION DATE: DEC 83

TITLE: SURFACE WATER MANAGEMENT: MANAGEMENT PRACTICES EVALUATION.

PERSONAL AUTHOR: HAAK, A.; OBERTS, G. L.

DESCRIPTOR: *DESIGN; *EVALUATION; *MANAGEMENT; *NATURAL RESOURCES; *PLANNING; *SURFACE WATER; *WATER RESOURCES; *WATER QUALITY; *WATER SUPPLY

DESCRIPTIVE NOTE: 225P. PRICE CODE: PC A10/MF A01; PB84-156702

ABSTRACT: THIS REPORT PROVIDES INFORMATION ON THE WATER QUANTITY AND QUALITY EFFECTIVENESS OF ALL COMMONLY USED MANAGEMENT PRACTICES. THE PRACTICES ARE DISCUSSED AS THEY APPLY TO URBAN AND AGRICULTURAL AREAS, AND ARE BROKEN INTO GROUPS OF RELATED PRACTICES. EACH PRACTICE IS DESCRIBED AND THE PURPOSE IS DISCUSSED, FOLLOWED BY A BRIEF DISCUSSION OF THE TARGET POLLUTANTS FOR WHICH THE PRACTICE SHOULD BE USED. PLANNING AND DESIGN CONSIDERATIONS, INCLUDING COSTS, ARE PRESENTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011015

PUBLICATION DATE: FEB 84

TITLE: WASTEWATER TREATMENT BY SAND FILTRATION. 1977-1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *EFFLUENTS; *FILTRATION; *INDUSTRIAL WASTES; *MUNICIPAL WASTES; *RESEARCH; *SAND FILTRATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 66P. PRICE CODE: PC N01/MF N01; PB84-859529

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF SAND FILTRATION IN TREATMENT OF WASTEWATER. TREATMENT SYSTEMS FOR BOTH DOMESTIC AND INDUSTRIAL EFFLUENTS ARE DISCUSSED. DESIGN OF SAND FILTERS AS THE PRIMARY FILTERING MECHANISM, AS WELL AS THEIR USE IN A COMBINATION OF DIFFERENT PROCESSES ARE INCLUDED. (CONTAINS 55 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011016

PUBLICATION DATE: FEB 84

TITLE: WASTEWATER TREATMENT: OZONATION PROCESSES AND EQUIPMENT. 1977-1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *DISINFECTION; *EQUIPMENT; *OPERATIONS (WASTEWATER); *OZONE; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 236P. PRICE CODE: PC N01/MF N01; PB84-859487

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE UTILIZATION OF OZONATION PROCESSES FOR WASTEWATER DISINFECTION. TOPICS INCLUDE SYSTEM DESCRIPTIONS AND EVALUATIONS, COMPARISONS WITH THE CHLORINATION PROCESS, REACTION KINETICS, AND THE USE OF THE PROCESS IN COMBINATION WITH OTHER WASTEWATER TREATMENT METHODS. THE TREATMENT OF ORGANIC AND INORGANIC COMPOUNDS IN WASTEWATER AND MUNICIPAL WATER SUPPLIES IS DISCUSSED. (CONTAINS 235 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011017

PUBLICATION DATE: MAR 84

TITLE: EUTROPHIC LAKES. 1978-1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *ECOLOGY; *EUTROPHIC LAKES; *LAKES; *NITROGEN; *NUTRIENT LOADING; *PHOSPHORUS; *WATER QUALITY

DESCRIPTIVE NOTE: 116P. PRICE CODE: PC N01/MF N01; PB84-861038

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING CAUSES, EFFECTS, AND VARIOUS APPROACHES IN LIMITING NUTRIENT LOADING INTO EUTROPHIC LAKES THROUGHOUT THE WORLD. NUTRIENT REMOVAL TREATMENT AND PERFORMANCE IS INCLUDED IN ANOTHER BIBLIOGRAPHY. EUTROPHIC LAKE IDENTIFICATION, AND ECOLOGICAL AND LIMNOLOGICAL STUDIES OF EUTROPHIC LAKE DEVELOPMENT AND RESTORATION ARE PRESENTED. PHOSPHORUS AND NITROGEN CONCENTRATIONS IN LAKES AND LAKE WATER QUALITY ANALYSIS ARE DISCUSSED. (CONTAINS 103 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011018

PUBLICATION DATE: MAR 84

TITLE: NUTRIENT REMOVAL FROM LAKES, PONDS, AND RIVERS. 1977-1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES;

*LAKES; *MANAGEMENT; *NUTRIENTS; *NUTRIENT REMOVAL; *PONDS; *RIVERS; *WATER QUALITY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 89P. PRICE CODE: PC N01/MF N01; PB84-861020

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING NUTRIENT REMOVAL TECHNIQUES IN LAKES, PONDS, RIVERS, AND STREAMS WITH RESPECT TO WATER QUALITY CONTROL AND WASTE WATER MANAGEMENT. NATURAL AND ARTIFICIAL REMOVAL PROCESSES SUCH AS REMOVAL BY BIOLOGICAL TREATMENT, SEDIMENTATION, RESERVOIR, AND FLOODED FIELD ARE DISCUSSED. THE EFFECTS OF NUTRIENT REMOVAL ON ECOSYSTEMS IN LAKES, PONDS, AND RIVERS ARE CONSIDERED. (CONTAINS 74 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011019

PUBLICATION DATE: MAR 84

TITLE: EUTROPHICATION: WATER QUALITY AND POLLUTION CONTROL. 1970-JANUARY, 1984 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *EUTROPHICATION; *ECOLOGY; *MODELS; *POLLUTION; *POLLUTION CONTROL; *WATER QUALITY; *WATER POLLUTION

DESCRIPTIVE NOTE: 103P. PRICE CODE: PC N01/MF N01; PB84-860923

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING EUTROPHIC ANALYSIS, ASSESSMENT, EFFECTS, CONTROL, AND SURVEILLANCE OF INLAND AND COASTAL WATERS. EUTROPHICATION PROBLEMS IN RELATION TO WATER QUALITY AND WATER POLLUTION ARE DISCUSSED. APPLICATIONS OF ECOLOGICAL DYNAMICS AND MATHEMATICAL MODELS FOR EUTROPHICATION CONTROL OF WATERS ARE CONSIDERED. (CONTAINS 140 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST).

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011020

PUBLICATION DATE: FEB 84

TITLE: WATER TREATMENT MODEL FOR POLLUTANT EXPOSURE.

PERSONAL AUTHOR: HEDDEN, K. F.

DESCRIPTOR: *DRINKING WATER; *MANUALS; *MODELS; *OPERATIONS (WATER); *TOXIC SUBSTANCES; *WATER TREATMENT

DESCRIPTIVE NOTE: 56P. PRICE CODE: PC A04/MF A01; PB84-158328

ABSTRACT: A MATHEMATICAL MODEL OF POTABLE WATER TREATMENT TO REMOVE TOXIC SUBSTANCES HAS BEEN DEVELOPED FOR USE IN EXPOSURE ASSESSMENT MODELING. TREATMENT PROCESSES MODELED INCLUDE SEDIMENTATION, COAGULATION-FLOCCULATION, FILTRATION, AERATION, CHEMICAL OXIDATION, AND GRANULAR ACTIVATED CARBON ADSORPTION. BESIDES DESCRIBING THE USE OF THE PROGRAM, THIS USERS MANUAL PRESENTS EXAMPLE RUNS OF THE MODEL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011021

PUBLICATION DATE: FEB 84

TITLE: ODOR POLLUTION. 1977-FEBRUARY, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *AGRICULTURAL WASTES; *INDUSTRIAL WASTES; *ODOR POLLUTION; *ODORS; *TASTES; *WASTEWATER TREATMENT; *WATER; *WATER TREATMENT

DESCRIPTIVE NOTE: 113P. PRICE CODE: PC N01/MF N01; PB84-860337

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING ODOROUS AIR POLLUTANTS AND ODORS AND TASTES IN WATER. SOURCES INCLUDE AGRICULTURAL AND LIVESTOCK WASTES, SEWAGE SLUDGE, INDUSTRIAL WASTES, STACK EMISSION, VEHICULAR EXHAUSTS, DREDGE SPOIL, RENDERING PLANTS, HOSPITALS, OIL SPILLS, AND POLLUTED WATER STREAMS. TREATMENT METHODS, ENVIRONMENTAL PROTECTION, AND HUMAN FACTORS ARE CITED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 116 CITATIONS, 30 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011022

PUBLICATION DATE: FEB 84

TITLE: METALS RECOVERY FROM WASTES. 1966-1983 (CITATIONS FROM THE METALS ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *INDUSTRIAL WASTES; *METALS; *RECOVERY; *RECYCLING; *WASTE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 89P. PRICE CODE: PC N01/MF N01; PB84-859628

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RECOVERY AND RECYCLING OR REUSE OF FERROUS AND NONFERROUS METALS FROM VARIOUS INDUSTRIAL WASTES, ESPECIALLY WASTE WATERS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 166 CITATIONS, 21 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011023

PUBLICATION DATE: FEB 84

TITLE: PROTOCOL FOR ESTABLISHMENT OF A GROUND WATER MANAGEMENT AND PROTECTION PLAN.

DESCRIPTOR: *AQUIFERS; *GROUNDWATER; *MANAGEMENT; *OKLAHOMA; *PLANNING; *WATER POLLUTION CONTROL; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 204P. PRICE CODE: PC A10/MF A01; PB84-159292

ABSTRACT: LOCAL OFFICIALS CAN PROVIDE THE IMPETUS FOR THE ESTABLISHMENT OF A MANAGEMENT PROGRAM FOR WATER-SUPPLY AQUIFERS. THIS REPORT PROVIDES INFORMATION ON THE DEVELOPMENT OF A MANAGEMENT PLAN FOR A SPECIFIC AQUIFER IN OKLAHOMA. THE REPORT OUTLINES SPECIFIC MAJOR STEPS THAT WERE TAKEN TO ACCOMPLISH THE TASK. THE APPROACH SHOULD BE TRANSFERRABLE TO OTHER AREAS OF THE COUNTRY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011024

PUBLICATION DATE: JAN 84

TITLE: POTENTIAL ANALYZERS OF TOXIC MATERIALS FOR ON-LINE USE.

PERSONAL AUTHOR: ROESLER, J. F.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *MEASUREMENT; *MONITORING; *ONLINE OPERATIONS; *PERFORMANCE EVALUATION; *RECOMMENDATIONS; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 40P. PRICE CODE: PC A03/MF A01; PB84-157957

ABSTRACT: THERE IS NO UNIVERSAL TOXIC MONITOR CAPABLE OF MONITORING ALL MATERIALS THAT ARE TOXIC TO HUMANS. THE BEST THAT CAN BE DONE IS TO QUALITATIVELY DETECT THE PRESENCE OF THE MOST LIKELY TOXIC MATERIALS IN CERTAIN APPLICATIONS. IN THIS PAPER, FIVE CLASSES OF ANALYZERS ARE REVIEWED THAT ARE CAPABLE OF DETECTING ONE OR MORE TOXIC MATERIALS OR THEIR SURROGATES. RECOMMENDATIONS ARE MADE TO AUTOMATE EACH OF THESE SYSTEMS FOR ON-LINE OPERATIONS. THE CLASSES OF ANALYZERS AS USED IN THIS PAPER ARE: LIFE FUNCTION MONITORS, ENZYMATIC RESPONSE, RESPIROMETERS, ORGANIC HALIDE MONITORS AND SPECIFIC MONITORING FOR SURROGATES USING SUCH EQUIPMENT AS ON-LINE GAS CHROMATOGRAPHS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011025

PUBLICATION DATE: FEB 84

TITLE: ASSESSMENT OF INNOVATIVE TECHNIQUES TO DETECT WASTE IMPOUNDMENT LINER FAILURES.

PERSONAL AUTHOR: WALLER, M. J.; DAVIS, J. L.

DESCRIPTOR: *GROUNDWATER; *LEAKS; *LINERS; *LINER FAILURES; *LITERATURE REVIEWS; *MONITORING; *PERFORMANCE EVALUATION; *WASTE IMPOUNDMENTS; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 149P. PRICE CODE: PC A07/MF A01; PB84-157858

ABSTRACT: THE GOAL OF THE PROGRAM WAS TO IDENTIFY AND EVALUATE NONDESTRUCTIVE MONITORING TECHNIQUES FOR THEIR ABILITY TO DETECT A LEAK IN EITHER EXISTING OR PLANNED WASTE IMPOUNDMENT LINERS. IN THE CASE OF EXISTING SITES, ANY TECHNIQUE THAT MIGHT IMPROVE THE LIMITATIONS OF CONVENTIONAL GROUNDWATER QUALITY MONITORING PRACTICES WAS IDENTIFIED. THUS, ANY TECHNIQUE THAT CAN DETECT THE PRESENCE OF LEACHATE MOVING OUT FROM A SITE BEFORE IT ACTUALLY CONTACTS THE GROUNDWATER WAS IDENTIFIED. IN PLANNED SITES, THE 1 SQ FT GOAL WAS IDENTIFIED AS AN IDEAL TO WORK TOWARD. APPROXIMATELY 28 CANDIDATE GEOPHYSICAL TECHNIQUES WERE REVIEWED IN THE LITERATURE SURVEY. OF THESE, 20 WERE IDENTIFIED AS HAVING POTENTIAL AS LEAK DETECTION TECHNIQUES AND WERE ASSESSED DURING THE RANKING EXERCISE.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011027

PUBLICATION DATE: 83

TITLE: REDUCING AERATION COSTS.

DESCRIPTOR: *AERATION; *CONFERENCE PROCEEDINGS; *DESIGN; *EQUIPMENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *ACTIVATED SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 156P. PRICE: $15.00 NON-MEMBERS; $12 MEMBERS

ABSTRACT: REDUCING AERATION COSTS PRESENTS FOUR PAPERS AND DISCUSSION OF A SYMPOSIUM HELD IN BRISTOL ON 19 OCTOBER, 1983. THE PROCEDURE THAT CAN BE ADOPTED TO TEST FULL-SCALE AERATION SYSTEMS IN 'CLEAN WATER' AND ACTIVATED SLUDGE ARE DESCRIBED IN THE FIRST PAPER AND THE THEORY BEHIND THESE PROCEDURES IS SHOWN IN AN APPENDIX. THE SECOND PAPER EXAMINES THE PERFORMANCE OF AERATORS IN TERMS OF THE MANUFACTURERS' CLAIMS AND IN TERMS OF WHAT IS ACTUALLY ACHIEVED, AND DISCUSSES THE REASONS FOR DISCREPANCIES AND CONSIDERS THE POTENTIAL FOR OPTIMIZATION OF PERFORMANCE. THE IMPORTANCE OF DESIGNING FOR FLEXIBILITY IN OPERATION IS STRESSED IN THE THIRD PAPER WHICH ALSO IDENTIFIES THE MOST IMPORTANT DESIGN FEATURES WHICH ARE COMMENSURATE WITH OPTIMIZING PLANT OPERATION. IT ALSO GIVES A NUMBER OF

EXAMPLES OF PRACTICE AND THEORY. THE FOURTH PAPER DEALS WITH AN ALTERNATIVE TO THE ACTIVATED-SLUDGE PROCESS, THE PERCOLATING (TRICKLING, OR BIOLOGICAL) FILTRATION SYSTEM WHICH IS STILL WIDELY USED IN THE INDUSTRY. IT PRESENTS SOME COMPARISONS AND CONTRASTS BETWEEN THE TWO SYSTEMS BASED ON OBSERVED RESULTS RATHER THAN THEORY.

AVAILABILITY: THE INSTITUTE OF WATER POLLUTION CONTROL, LEDSON HOUSE, 53 LONDON ROAD, MAIDSTONE, KENT. ME16 8JH, ENGLAND

IRIS ACCESSION NUMBER: EW011028

PUBLICATION DATE: MAR 84

TITLE: TEST METHOD TECHNICAL ADDITION TO METHODS FOR CHEMICAL ANALYSIS OF WATER AND WASTES (EPA-600/4-79-020).

PERSONAL AUTHOR: O'DELL, JAMES W.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *INORGANIC ANIONS; *CHEMICAL ANALYSIS; *CHLORIDES; *FLUORIDES; *ION CHROMATOGRAPHY; *NITRATES; *NITRITES; *ORTHO-PHOSPHATES; *SULFATES; *TEST METHODS; *WASTEWATER; *WATER

DESCRIPTIVE NOTE: 5P.

ABSTRACT: THIS METHOD COVERS THE DETERMINATION OF SEVERAL INORGANIC ANIONS. INCLUDED ARE CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE, AND ORTHO-PHSOPHATE.

AVAILABILITY: US ENVIRONMENTAL PROTECTION AGENCY, ENVIRONMENTAL MONITORING AND SUPPORT LABORATORY, CINCINNATI, OH 45426

IRIS ACCESSION NUMBER: EW011029

PUBLICATION DATE: APR 84

TITLE: MONITOR: 30/30 HINDSIGHT.

PERSONAL AUTHOR: CARTER, KAREN B.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BOD; *CBOD; *EFFLUENTS; *DISCHARGE PERMITS; *LABORATORY PROCEDURES; *OPERATIONS (WASTEWATER); *REGULATIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 301-305P.

ABSTRACT: DISCUSSED IS A MODIFICATION OF EPA REGULATIONS ALLOWING THE USE OF THE CBOD TEST IN PLACE OF THE BOD TEST ON EFFLUENT DISCHARGE PERMITS. IMPLICATIONS OF THE TESTS ARE CONSIDERED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011030

PUBLICATION DATE: APR 84

TITLE: HISTORY OF WATER POLLUTION CONTROL.

PERSONAL AUTHOR: FUHRMAN, RALPH E.

DESCRIPTOR: *HISTORY; *OPERATIONS (WASTEWATER); *PUBLIC WORKS; *SANITATION; *SEWERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 306-313P.

ABSTRACT: PRESENTED IS A BRIEF HISTORY OF WATER POLLUTION CONTROL. THE DISCUSSION INCLUDES BOTH EUROPEAN AND U.S. EXAMPLES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011031

PUBLICATION DATE: APR 84

TITLE: CHEMICAL SELECTION AND OPERATIONAL CONSIDERATIONS FOR FILTER PRESS DEWATERING.

PERSONAL AUTHOR: SLIGAR, MICHAEL J.

DESCRIPTOR: *CHEMICALS; *COSTS; *DEWATERING; *FILTER PRESSES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 314-318P.

ABSTRACT: THE PURPOSE OF THIS PAPER IS TO DESCRIBE THE PROCEDURE FOR SELECTION OF THE MOST EFFECTIVE ORGANIC POLYMER FOR SLUDGE DEWATERING. RELATIVE EFFECTIVENESS OF CHEMICALS IS JUST AS IMPORTANT AS UNIT PRICES, AND CAN BE EVALUATED BY SIMPLE LAB TESTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011032

PUBLICATION DATE: APR 84

TITLE: ON-LINE MEASUREMENT OF RESPIRATION AND MASS TRANSFER RATES IN AN ACTIVATED SLUDGE AERATION TANK.

PERSONAL AUTHOR: HOWELL, JOHN A.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *AERATION TANKS; *DISSOLVED OXYGEN; *MASS TRANSFER; *MODELS; *MEASUREMENT; *OPERATIONS (WASTEWATER); *OXYGEN; *PROCESS CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 319-324P.

ABSTRACT: A LINEAR MODEL OF MASS TRANSFER RATES ALLOWS RAPID COMPUTATION OF THE DISSOLVED OXYGEN UPTAKE RATES FOR PROCESS CONTROL IN ACTIVATED SLUDGE AERATION TANKS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011033

PUBLICATION DATE: APR 84

TITLE: MAKING FULL USE OF STEP FEED CAPABILITY.

PERSONAL AUTHOR: BUHR, HEINRICH O.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE PROCESS; *OPERATIONS (WASTEWATER); *PROCESS CONTROL; *SETTLING; *SLUDGE; *STEP-FEED; *SUSPENDED SOLIDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 325-330P.

ABSTRACT: A FORMALIZED STEP-FEED OPERATING PROGRAM PROTECTS EFFLUENT QUALITY WHILE STEPS ARE TAKEN TO CORRECT MALFUNCTIONS. THIS PAPER DETAILS THE EFFECTS OF MOVING THE FEED POINT AND DESCRIBES THE CONTROL TECHNIQUES USED TO TAKE FULL OPERATIONAL ADVANTAGE OF A STEP FEED CAPABILITY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011034

PUBLICATION DATE: APR 84

TITLE: EVALUATION OF FILTER PRESS PERFORMANCE FOR SLUDGE DEWATERING.

PERSONAL AUTHOR: MININNI, GIUSEPPE; AND OTHERS

DESCRIPTOR: *DEWATERING; *FILTER PRESSES; *EQUIPMENT; *MODELS; *OPERATIONS (WASTEWATER) *PERFORMANCE EVALUATION; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 331-336P.

ABSTRACT: A MODEL TO PREDICT FILTER CAKE CONCENTRATION WAS SET UP BASED ON PILOT AND LABORATORY SCALE FILTER PRESS TESTS. RESULTS ARE REPORTED. THE MODEL ILLUSTRATED THE INFLUENCE OF SLUDGE CHARACTERISTICS, EQUIPMENT VARIABLES, AND OPERATING VARIABLES ON FINAL CAKE CONCENTRATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011035

PUBLICATION DATE: APR 84

TITLE: FULL-SCALE EVALUATION OF AERATED GRIT CHAMBERS.

PERSONAL AUTHOR: MORALES, LILIANA; REINHART, DEBRA

DESCRIPTOR: *AERATION; *DESIGN; *EQUIPMENT; *GRIT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 337-343P.

ABSTRACT: THE PERFORMANCE OF FIVE AERATED GRIT CHAMBERS WAS EVALUATED. DATA FOR COMPARISON WERE GENERATED FROM SEVERAL SOURCES. AMONG THE DESIGNS EVALUATED, A LONG, NARROW TANK PERFORMED BEST. THE QUALITY OF GRIT REMOVAL WAS RELATED TO THE TYPE OF MECHCANICAL EQUIPMENT USED; TABULAR AND SCREW CONVEYORS PROVIDED THE BEST QUALITY GRIT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011036

PUBLICATION DATE: APR 84

TITLE: CHEMICAL ASPECTS OF THE LIME SEAWATER PROCESS.

PERSONAL AUTHOR: FERGUSON, JOHN F.; VRALE, LASSE

DESCRIPTOR: *CHEMICALS; *LIME; *OPERATIONS (WASTEWATER); *PHOSPHORUS; *PERFORMANCE EVALUATION; *SEAWATER; *SUSPENDED SOLIDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 355-363P.

ABSTRACT: THE ADDITION OF MODERATE AMOUNTS OF SEAWATER CAN SUBSTANTIALLY REDUCE THE LIME DOSAGE NEEDED TO REMOVE SUSPENDED SOLIDS AND PHOSPHATES AT WASTEWATER TREATMENT PLANTS WHERE BOD REMOVAL IS NOT REQUIRED AND WHERE DISCHARGE IS TO MARINE WATERS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011037

PUBLICATION DATE: APR 84

TITLE: NEW BLEACHED KRAFT PULP PLANT IN GEORGIA--STATE OF THE ART EVNIRONMENTAL CONTROL.

PERSONAL AUTHOR: BYRD, J. F.; AND OTHERS

DESCRIPTOR: *BOD; *EFFLUENT; *COLOR; *INDUSTRY; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PULP INDUSTRY; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 378-383P.

ABSTRACT: DESCRIBED IS THE OPERATION OF A BLEACHED KRAFT PULP PLANT NEAR OGLETHORPE GEORGIA. THE PLANT APPEARS TO BE EFFECTIVE IN PRODUCING EFFLUENT LOW IN BOD AND COLOR.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N4

IRIS ACCESSION NUMBER: EW011038

PUBLICATION DATE: MAY 84

TITLE: WHAT YOU SEE IS WHAT YOU GET.

PERSONAL AUTHOR: ROBINSON, ANNE DURRUM

DESCRIPTOR: CONFLICT RESOLUTION; CONCEPT DEVELOPMENT; GOALS; *HUMAN RESOURCE DEVELOPMENT; *INSTRUCTION; *MENTAL IMAGERY; PROBLEM SOLVING; *TRAINING

DESCRIPTIVE NOTE: 34-39P.

ABSTRACT: MENTAL IMAGERY AND VISUALIZATION CAN BE PRODUCTIVE TOOLS FOR MANY TRAINING AND BUSINESS SITUATIONS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V38 N5

IRIS ACCESSION NUMBER: EW011039

PUBLICATION DATE: MAY 84

TITLE: HOW MASTER TRAINERS GET THAT WAY.

PERSONAL AUTHOR: LAIRD, DUGAN; BELCHER, FORREST

DESCRIPTOR: *INSTRUCTION; *INSTRUCTIONAL PROCEDURES; *TEACHER CHARACTERISTICS; *TRAINING

DESCRIPTIVE NOTE: 73-75P.

ABSTRACT: THE AUTHORS DISCUSS THE IMPORTANCE OF LEARNING THE BEHAVIORS ASSOCIATED WITH MASTER TRAINERS. EXAMPLES OF INSTRUCTIONAL PROCEDURES USED ARE DESCRIBED.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V38 N5

IRIS ACCESSION NUMBER: EW011042

PUBLICATION DATE: 84

TITLE: SYNTHETIC MEMBRANE PROCESSES.

PERSONAL AUTHOR: BELFORT, GEORGES

DESCRIPTOR: *DESALINATION; *DESIGN; *DIALYSIS; *ECONOMICS; *FILTRATION; *MEMBRANES; *MEMBRANE PROCESSES; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 576P. PRICE: $72.50

ABSTRACT: THE LATEST THEORETICAL DEVELOPMENTS IN MEMBRANE AND FLUID TRANSPORT AND SYNTHETIC MEMBRANE TREATMENT PROCESSES ARE ANALYZED IN THIS WORK. CONTRIBUTIONS BY INTERNATIONAL EXPERTS CONSIDER THE SUBJECT FROM THE PERSPECTIVE OF THE CHEMICAL ENGINEER AND PROVIDE A VALUABLE INTEGRATION OF THEORY AND PRACTICAL APPLICATIONS. THE CHAPTERS REVIEW THE FUNDAMENTALS OF HYPERFILTRATION, ULTRAFILTRATION, AND ELECTRODIALYSIS; SUMMARIZE THE EXPERIENCE WITH THESE PROCESSES IN TREATING WATER AND WASTEWATER; EXAMINE THE DESIGN AND OPERATION OF MEMBRANE PLANTS NOW ESTABLISHED IN THE UNITED STATES, JAPAN, AND EUROPE; AND ANALYZE CURRENT ECONOMIC CONSIDERATIONS INVOLVED IN THE IMPLEMENTATION OF MEMBRANE PROCESSES. THE VOLUME ALSO COVERS PRETREATMENT, MEMBRANE CLEANING, AND FLUID MANAGEMENT FOR THE REDUCTION OF THE DEGRADATION EFFECTS OF MEMBRANE FOULING.

AVAILABILITY: ACADEMIC PRESS, INC., P.O. BOX 733, OLD CHELSEA STATION, NEW YORK, NY 10114

IRIS ACCESSION NUMBER: EW011043

PUBLICATION DATE: 84

TITLE: MODELING WATER DEMANDS.

PERSONAL AUTHOR: KINDLER, JANUSZ; RUSSEL, CLIFFORD S.

DESCRIPTOR: *AGRICULTURE; *INSTRUCTIONAL MATERIALS; *INDUSTRY; *MODELS; *MUNICIPALITIES; *POSTSECONDARY EDUCATION; *WATER DEMANDS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 264P. PRICE: $28.00

ABSTRACT: THIS BOOK DESCRIBES SOME ANALYTICAL APPROACHES AND SHOWS HOW THEY CAN BE USED TO ANALYZE WATER DEMANDS FOR INDUSTRY, AGRICULTURE, AND URBAN SETTLEMENTS. THE BOOK IS DIRECTED PRIMARILY TOWARD ANALYSTS RESPONSIBLE FOR GENERATING INFORMATION ON WATER DEMANDS IN RELATION TO PLANNING DECISIONS IN WATER RESOURCES MANAGEMENT. CONTENTS INCLUDE: (1) WATER DEMAND; (2) METHODOLOGICAL FRAMEWORK; (3) INDUSTRIAL WATER DEMANDS; (4)AGRICULTURAL WATER DEMANDS; (5) MUNICIPAL WATER DEMANDS; (6) PROGRAMMING MODELS FOR REGIONAL WATER DEMAND ANALYSIS; (7) THE NATIONAL PERSPECTIVE IN WATER DEMAND MODELING; AND (8) SUMMARY AND REFLECTIONS.

AVAILABILITY: ACADEMIC PRESS, INC., P.O. BOX 733, OLD CHELSEA STATION, NEW YORK, NY 10114

IRIS ACCESSION NUMBER: EW011045

PUBLICATION DATE: MAY 84

TITLE: SMALL CITY FINDS WAY TO ACQUIRE LARGE CLEANOUT RIG.

DESCRIPTOR: *CONTRACT SERVICES; *COSTS; *EQUIPMENT;

*MAINTENANCE; *OPERATIONS (WASTEWATER); *SEWER CLEANERS; *SEWERS; *WASTE DISPOSAL; *WASTEWATER COLLECTION; *WASTERWATER TREATMENT

DESCRIPTIVE NOTE: 68-69P.

ABSTRACT: DESCRIBED IS THE PURCHASE OF A LARGE SEWER CLEANOUT MACHINE BY A SMALL COMMUNITY IN NEBRASKA. THE MACHINE WAS PAID FOR BY ISSUING BONDS. COSTS OF OWNERSHIP AND OPERATIONS ARE RECOVERED BY LOCAL USE AND CONTRACTED SERVICES TO OTHER COMMUNITIES.

AVAILABILITY: PUBLIC WORKS; V115 N5

IRIS ACCESSION NUMBER: EW011046

PUBLICATION DATE: FEB 84

TITLE: INDUSTRIAL MANAGEMENT AND DECISION MAKING TOWARD ENVIRONMENTAL POLLUTION. MAY, 1963 - FEBRUARY 1984. (CITATIONS FROM THE MANAGEME

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DECISION MAKING; *ENVIRONMENTAL POLLUTION; *INDUSTRIAL WASTES; *INDUSTRIAL MANAGEMENT; *LEGISLATION; MANAGEMENT; *REGULATIONS; *RESEARCH

DESCRIPTIVE NOTE: 56P. PRICE CODE: PC N01/MF N01; PB84-860618

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING ENVIRONMENTAL PROTECTION, REGULATION, LEGISLATION, RESEARCH, AND DECISION MAKING FOR INDUSTRIAL WASTE MANAGEMENT. TOPICS CONCERNING LAND USE CONTROL, TOXIC DUMP SITES, AND WASTE CONTROL AND TREATMENT ARE PRESENTED. ENVIRONMENTAL IMPACT STATEMENTS FOR FUTURE PLANNING AND DECISION MAKING OF HAZARDOUS CHEMICALS ARE ALSO INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 94 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011047

PUBLICATION DATE: FEB 84

TITLE: INDUSTRIAL MANAGEMENT AND DECISION MAKING TOWARD ENVIRONMENTAL POLLUTION. FEBRUARY 1978 - APRIL, 1983. (CITATIONS FROM THE MANAGE

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *DECISION MAKING; BIBLIOGRAPHIES; *ENVIRONMENT; *INDUSTRIAL MANAGEMENT; *INDUSTRY; *LEGISLATION; *MANAGEMENT; *POLLUTION; *POLLUTION CONTROL; *REGULATIONS; *WASTE CONTROL; *WASTE TREATMENT

DESCRIPTIVE NOTE: 229P. PRICE CODE: PC N01/MF N01; PB84-860600

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING ENVIRONMENTAL PROTECTION, REGULATION, LEGISLATION, RESEARCH, AND DECISION MAKING FOR INDUSTRIAL WASTE MANAGEMENT. TOPICS CONCERNING LAND USE CONTROL, TOXIC DUMP SITES, AND WASTE CONTROL AND TREATMENT ARE PRESENTED. ENVIRONMENTAL IMPACT STATEMENTS FOR FUTURE PLANNING AND DECISION MAKING OF HAZARDOUS CHEMICALS ARE ALSO INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS THE 330 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011048

PUBLICATION DATE: APR 83

TITLE: PRIORITY REVIEW OF THE MARINE SANITATION DEVICE (MSD) REGULATIONS (33CFR 159). EXECUTIVE SUMMARY AND REPORT.

DESCRIPTOR: *EQUIPMENT; *MARINE ENVIRONMENT; *MARINE SANITATION DEVICE; *REGULATIONS; *SANITATION; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 57P. PRICE CODE: PC A04/MF A01; PB84-166339

ABSTRACT: THE PURPOSE OF THIS REVIEW IS TO DISCUSS OPTIONS FOR REVISIONS TO THE EXISTING MARINE SANITATION DEVICE (MSD) PROGRAM. THE CLEAN WATER ACT, WHICH IS THE LEGISLATIVE AUTHORITY FOR THE EXISTING PROGRAM, REQUIRES THE COAST GUARD TO ISSUE REGULATIONS FOR MSD'S BASED UPON EPA STANDARDS. THE DEPARTMENT OF TRANSPORTATION IDENTIFIED THE REGULATIONS AS BEING COSTLY AND CONTROVERSIAL AND TASKED THE COAST GUARD WITH CONDUCTING A REGULATORY REVIEW. THIS DOCUMENT PRESENTS THE REVIEW RESULTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011049

PUBLICATION DATE: APR 83

TITLE: PRIORITY REVIEW OF THE MARINE SANITATION DEVICE (MSD) REGULATIONS (33 CFR 159). APPENDICES.

DESCRIPTOR: *BOATS; *COSTS; *EFFLUENTS; *EQUIPMENT; *PERFORMANCE EVALUATION; *REGULATIONS; *MARINE SANITATION DEVICES; *SANITATION DEVICES; *SHIPS; *TECHNOLOGY; *WASTERWATER TREATMENT

DESCRIPTIVE NOTE: 399P. PRICE CODE: PC A17/MF A01; PB84-166347

ABSTRACT: INCLUDED ARE: (1) A REPORT ON THE EXISTING PROGRAM FOR REGULATION OF MARINE SANITATION DEVICES UNDER SECTION 312 OF THE CLEAN WATER ACT; (2) COSTS AND BENEFITS OF THE EPA/U.S. COST GUARD MARINE SANITATION DEVICE (MSD) REGULATIONS; (3) A PRIORITY REVIEW OF MARINE SANITATION

DEVICE (MSD) REGULATIONS; (4) A SUMMARY OF PUBLIC COMMENTS; (5) SMALL VESSEL TYPE II SEWAGE TREATMENT TECHNOLOGY DEVELOPMENTAL PROBLEMS; AND (6) ANALYSIS OF WASTEWATER DISCHARGE FROM MARINE SANITATION DEVICES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011050

PUBLICATION DATE: FEB 84

TITLE: MODELING ASPECTS OF ESTUARINE EUTROPHICATION. 1977 - 1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ESTUARIES; *EUTROPHICATION; *MODELS; *RESEARCH REPORTS; *WATER QUALITY

DESCRIPTIVE NOTE: 107P. PRICE CODE: PC N01/MF N01; PB84-860550

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING MATHEMATICAL MODELING OF EXISTING WATER QUALITY STRESSES IN ESTUARIES, HARBORS, BAYS, AND COVES. BOTH PHYSICAL HYDRAULIC AND NUMERICAL MODELS FOR ESTARINE CIRCULATION ARE DISCUSSED. (CONTAINS 97 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011051

PUBLICATION DATE: FEB 84

TITLE: POLYCHLORINATED BIPHENYLS: OCCURRENCE IN SEDIMENTS AND SOILS. 1977 - JANUARY, 1984. (CITATIONS FROM THE SELECTED WATER RESOURCES

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; *BIOACCUMULATION; BIBLIOGRAPHIES; *CHEMICAL DECOMPOSITION; *DETECTION METHODS; *DREDGING; *POLYCHLORINATED BIPHENYLS; *RESEARCH REPORTS; *SEDIMENTS; *SOILS

DESCRIPTIVE NOTE: 124P. PRICE CODE: PC N01/MF N01; PB84-860790

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING FIELD AND LABORATORY ANALYSES OF POLYCHLORINATED BIPHENYLS IN SEDIMENTS AND SOILS. TOPICS TREATED ARE SITE STUDIES, CHEMICAL ANALYSES OF ADSORPTION-DESORPTION PROCESSES, DECOMPOSITION IN SOILS, INCLUDING BIODEGRADATION, AND BIOACCUMULATION. DETECTION METHODS AND EQUIPMENT, AND THE IMPACT OF DREDGING IN CONTAIMINATED AREAS IS ALSO DISCUSSED. (CONTAINS 113 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011052

PUBLICATION DATE: MAR 84

TITLE: EUTROPHICATION: WATER QUALITY AND POLLUTION CONTROL. 1978-1983. (CITATIONS FROM POLLUTION ABSTRACTS).

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ENVIRONMENTAL IMPACTS; *EUTROPHICATION; *LAKES; *RESERVOIRS; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 99P. PRICE CODE: PC N01/MF N01; PB84-861533

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING CAUSES, EFFECTS, PREVENTION, AND CONTROL OF EUTROPHICATION IN INLAND AND COASTAL WATERS. WATER QUALITY ANALYSIS AND ASSESSMENT, AND EUTROPHICATION IN RELATION TO THE LOAD OF POLLUTION IN WATERS ARE DISCUSSED. LAKE AND RESERVOIR RESTORATION METHODS, PHOSPHORUS AND NITROGEN REMOVAL TECHNIQUES, AND EFFECTS OF EUTROPHICATION ON AQUATIC ECOSYSTEMS ARE CONSIDERED. (CONTAINS 108 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011053

PUBLICATION DATE: MAR 84

TITLE: OCEAN WATSE DISPOSAL. 1977 - JANUARY, 1984. (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ENVIRONMENTAL IMPACTS; *INDUSTRIAL WASTES; *MUNICIPAL WASTES; *OCEANS; *RESEARCH REPORTS; *WASTE DISPOSAL .

DESCRIPTIVE NOTE: 158P. PRICE CODE: PC N01/MF N01; PB84-861608

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE EFFECTS AND POTENTIAL IMPACTS OF WASTE MATERIALS DUMPING IN THE OCEANS. AMONG THE TYPES OF WASTES DISCUSSED ARE RADIOACTIVE WASTES, SOLID AND LIQUID INDUSTRIAL WASTES, AND SEWAGE TYPE WASTES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 149 CITATIONS, 11 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011054

PUBLICATION DATE: MAR 84

TITLE: WATER QUALITY MODELING: HYDROLOGICAL SYSTEMS. 1977-MAR, 1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ECONOMICS; *HYDROLOGY; *MANAGEMENT; *MODELS; *POLLUTANTS; *SALINITY; *SEDIMENTS; *WATER QUALITY; *WATER RESOURCES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 389P. PRICE CODE: PC N01/MF N01; PB84-861657

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TECHNIQUES AND USES OF HYDROLOGIC MODELS. MODELS ARE USED FOR HYDROLOGIC TRANSPORT, CATCHMENT, STORAGE, STREAM FLOW, AQUIFER MANAGEMENT, AND WATER QUALITY IN TERMS OF SEDIMENT, SALINITY, AND POLLUTANTS. SOME MODELS ADDRESS THE ECONOMIC FACTORS OF WATERSHEDS AND RIVERS. A FEW OF THE CITATIONS RELATE TO DATA COLLECTION FOR MODEL STUDIES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 288 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PROVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011055

PUBLICATION DATE: MAR 84

TITLE: WATER QUALITY MODELING: HYDROLOGICAL SYSTEMS. APRIL, 1983 - JANUARY, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS.

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ECONOMICS; *HYDROLOGY; *MODELS; *MANAGEMENT; *RESEARCH REPORTS; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 88P. PRICE CODE: PC N01/MF N01; PB84-861665

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TECHNIQUES AND USES OF HYDROLOGIC MODELS. MODELS ARE USED FOR HYDROLOGIC TRANSPORT, CATCHMENT, STORAGE, STREAM FLOW, AQUIFER MANAGEMENT, AND WATER QUALITY IN TERMS OF SEDIMENT, SALINITY, AND POLLUTANTS. SOME MODELS ADDRESS THE ECONOMIC FACTORS OF WATERSHEDS AND RIVERS. A FEW OF THE CITATIONS RELATE TO DATA COLLECTION FOR MODEL STUDIES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 78 CITATIONS, ALL OF WHICH ARE NEW ENTRIES THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011056

PUBLICATION DATE: MAR 84

TITLE: FOAM SEPARATION IN WASTEWATER TREATMENT. 1977 - MARCH, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *FOAM SEPARATION; *INDUSTRIAL WASTES; *METALS; *OPERATIONS (WASTEWATER); *PAPER INDUSTRY; *RESEARCH REPORTS; *WASTEWATER TREATMENT; *VIRUSES

DESCRIPTIVE NOTE: 69P. PRICE CODE: PC N01/MF N01; PB84-861673

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF FOAM SEPARATION FOR DETOXIFICATION OF WASTEWATER. THE REMOVAL OF MIXTURES OF METALS, VIRUSES, AND OTHER CONTAMINATS ARE DISCUSSED WITH SOME CONSIDERATION GIVEN TO THE PULP AND PAPER INDUSTRY. (CONTAINS 63 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011057

PUBLICATION DATE: MAR 84

TITLE: SAND FILTRATION. 1970 - 1983 (CITATIONS FROM POLLUTION ABSTRACTS).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DESIGN; *FILTRATION; *MODELS; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *SAND FILTRATION; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 58P. PRICE CODE: PC N01/MF N01; PB84-861681

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE USE OF SAND FILTRATION FOR WATER AND WASTEWATER PURIFICATION. DESIGNING AND MATHEMATICAL MODELING OF SAND FILTERS, AS WELL AS THEIR USE IN SEWAGE TREATMENT IS DISCUSSED. (CONTAINS 78 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011058

PUBLICATION DATE: MAR 84

TITLE: ACTIVATED SLUDGE PROCESS USED IN COAL CONVERSION. 1976 - FEBRUARY 1984 (CITATIONS FROM THE ENERGY DATA BASE).

DESCRIPTOR: *ACTIVATED SLUDGE PROCESS; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *COAL; COAL CONVERSION;

*INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *POLLUTION CONTROL; *WATER REUSE; *WASTEWATER TREATMENT; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 108P. PRICE CODE: PC N01/MF N01; PB84-861798

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TREATMENT OF COAL CONVERSION WATERS BY THE ACTIVATED SLUDGE PROCESS TO PREVENT ENVIRONMENTAL POLLUTION AND, IN SOME CASES, TO PERMIT THE REUSE OF THESE WASTE WATERS. CONSIDERATION IS GIVEN TO EXPERIMENTAL, TECHNICAL, AND OPERATIONAL ASPECTS OF THE PROCESS AS WELL AS TO PROCESS APPARATUS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 104 CITATIONS, 23 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011059

PUBLICATION DATE: MAR 84

TITLE: SEDIMENT-WATER INTERACTIONS AND THEIR EFFECTS UPON WATER QUALITY. 1979 - MARCH 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *CHEMICAL REACTIONS; *HEAVY METALS; IONS; METALS; *NUTRIENTS; *RESEARCH REPORTS; *SEDIMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 86P. PRICE CODE: PC N01/MF N01; PB84-861822

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RELEASE AND ABSORPTION OF CHEMICALS BY SEDIMENTS, AS IT RELATES TO WATER QUALITY. TOPICS INCLUDE NUTRIENT RECYCLING, ABSORPTION AND DESORPTION OF HEAVY METALS AND PESTICIDES, ION EXCHANGING, EFFECTS UPON BIOLOGICAL PROCESSES, THE CHEMISTRY INVOLVED, AND METHODS OF STOPPING DESORPTION. SALT WATER STUDIES HAVE BEEN EXCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 78 CITATIONS, 37 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011061

PUBLICATION DATE: MAY 84

TITLE: TECHNIQUES FOR PROTECTING GROUNDWATER QUALITY.

PERSONAL AUTHOR: GERAGHTY, JAMES J.

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *TECHNOLOGY; *WATER QUALITY; *WATER POLLUTION CONTROL; *WATER RESOURCES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 34-47P.

ABSTRACT: CONTAMINATION PLUMES CAN BE CONTAINED OR DIVERTED FROM GROUNDWATER SUPPLIES. TECHNIQUES FOR PROTECTING GROUNDWATER QUALITY ARE DESCRIBED. AN EDUCATIONAL EFFORT DIRECTED TOWARD OWNERS AND OPERATORS OF POTENTIAL SOURCES OF CONTAMINATION IS NEEDED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N5

IRIS ACCESSION NUMBER: EW011062

PUBLICATION DATE: MAY 84

TITLE: LEGAL MEANS OF PROTECTING AQUIFERS.

PERSONAL AUTHOR: SELIG, EDWARD I.

DESCRIPTOR: *CLEANUP; *CONTAMINATION; *COSTS; *LEGAL ACTION; *LITIGATION; *GROUNDWATER; *WATER RATES; *WATER POLLUTION CONTROL; *WATER QUALITY; *WATER RESOURCES; *WATER TREATMENT

DESCRIPTIVE NOTE: 38-41P.

ABSTRACT: LEGAL MEANS FOR FILING SUIT TO RECOVER THE COSTS OF CLEANUP OF CONTAMINATED UNDERGROUND WATER SUPPLIES ARE SUMMARIZED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N5

IRIS ACCESSION NUMBER: EW011063

PUBLICATION DATE: MAY 84

TITLE: REMOVING ORGANICS FROM GROUNDWATER THROUGH AERATION PLUS GAC.

PERSONAL AUTHOR: MCKINNON, RONALD J.; DYKSEN, JOHN E.

DESCRIPTOR: *AERATION; *DRINKING WATER; *GAC; *CONTAMINATION; *EQUIPMENT; *OPERATIONS (WATER); *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *TECHNOLOGY; *WATER TREATMENT

DESCRIPTIVE NOTE: 42-47P.

ABSTRACT: ETHERS AND OTHER VOLATILE ORGANIC COMPOUNDS WERE REMOVED FROM DRINKING WATER SUPPLIES IN ROCKAWAY TOWNSHIP, N. J. THE SYSTEM USED INVOLVED A GAC SYSTEM AND AERATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N5

IRIS ACCESSION NUMBER: EW011064

PUBLICATION DATE: MAY 84

TITLE: SAMPLING FOR ORGANIC CONTAMINANTS IN GROUNDWATER.

PERSONAL AUTHOR: GIBB, JAMES P.; BARCELONA, MICHAEL J.

DESCRIPTOR: *CHEMICAL REACTIONS; *ANALYTICAL TECHNIQUES; *CONTAMINATION; *CHEMICAL ANALYSIS; *GROUNDWATER; *ORGANIC COMPOUNDS; *RECOMMENDATIONS; *SAMPLING; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 48-51P.

ABSTRACT: PROPER SAMPLING OF REPRESENTATIVE GROUNDWATER SUPPLIES ENSURES THE INTEGRITY OF RESULTS. PROBLEMS IN SAMPLING ARE CONSIDERED. MORE RESEARCH IS NEEDED TO IMPROVE PROCEDURES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N5

IRIS ACCESSION NUMBER: EW011065

PUBLICATION DATE: MAY 84

TITLE: THE GROUNDWATER SUPPLY SURVEY.

PERSONAL AUTHOR: WESTRICK, JAMES J.; AND OTHERS

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *ORGANIC COMPOUNDS; *SURVEYS; *VOLATILE ORGANIC COMPOUNDS; *WATER TREATMENT; *WATER QUALITY; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 52-59P.

ABSTRACT: A NATIONWIDE SAMPLE OF GROUNDWATER SUPPLIES PROJECTS THE STATISTICAL PROBABILITY OF CONTAMINATION. THE SAMPLING INVOLVED VOLATILE ORGANIC COMPOUNDS IN FINISHED WATER SUPPLIES THAT USE GROUNDWATER RESOURCES. LARGER SYSTEMS HAD A SIGNIFICANTLY HIGHER FREQUENCY OF CONTAMINATION AND LEVELS OF CONTAMINATION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N5

IRIS ACCESSION NUMBER: EW011066

PUBLICATION DATE: MAY 84

TITLE: INORGANIC CHLORAMINES AS DRINKING WATER DISINFECTANTS: A REVIEW.

PERSONAL AUTHOR: WOLFE, ROY L.; AND OTHERS

DESCRIPTOR: *BACTERIA; *CHEMICAL REACTIONS; *CHLORAMINES; *DISINFECTION; *DRINKING WATER; *HEALTH EFFECTS; *LITERATURE REVIEWS; *ENVIRONMENTAL IMPACTS; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *VIRUSES; *WATER TREATMENT

DESCRIPTIVE NOTE: 74-88P.

ABSTRACT: CONTROVERSY EXISTS REGARDING THE EFFECTIVENESS OF CHLORAMINES AS MICROBICIDAL AGENTS AND THEIR POSSIBLE EFFECTS ON HUMAN HEALTH. THIS ARTICLE REVIEWS THE ADVANTAGES AND DISADVANTAGES OF THE USE OF CHLORAMINES IN DISINFECTION.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N5

IRIS ACCESSION NUMBER: EW011067

TITLE: DESALINATION TECHNOLOGY: DEVELOPMENTS AND PRACTICE.

PERSONAL AUTHOR: PORTEOUS, ANDREW

DESCRIPTOR: *BRACKISH WATER; *DESALINATION; *INSTRUCTIONAL MATERIALS; *OPERATIONS (WATER); *POSTSECONDARY EDUCATION; *SALINE WATER; *WATER TREATMENT

DESCRIPTIVE NOTE: 271P. PRICE: $48.00

ABSTRACT: A STATE-OF-THE-ART BOOK ON THE VARIOUS METHODS USED FOR OBTAINING POTABLE WATER FROM BRACKISH OR SALINE WATERS. A SERIES OF EIGHT ARTICLES DISCUSS THE THEORY, APPLICATION, AND EQUIPMENT USED IN THIS PROCESS.

AVAILABILITY: ELSEVIER SCIENCE PUBLISHING CO., INC., 52 VANDERBILT AVE., NEW YORK, NY 10017

IRIS ACCESSION NUMBER: EW011068

TITLE: CHEMISTRY AND UNIT OPERATIONS IN WATER TREATMENT.

PERSONAL AUTHOR: BARNES, D.; WILSON, F.

DESCRIPTOR: *CHEMISTRY; *INSTRUCTIONAL MATERIALS; *MATHEMATICAL CALCULATIONS; *MATHEMATICS; *OPERATIONS (WATER); *POSTSECONDARY EDUCATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 325P. PRICE: $55.50

ABSTRACT: A BASIC UNDERSTANDING OF CHEMISTRY AND ASSOCIATED MATHEMATICAL CALCULATIONS IS ESSENTIAL TO THE PROPER OPERATION OF A WATER TREATMENT FACILITY. THIS BOOK PROVIDES A COMPLETE SEQUENCE OF PROCESSES INVOLVED IN WATER TREATMENT AND THE PRACTICAL MEANS TO OBTAINING SOLUTIONS TO VARIOUS DESIGN AND OPERATIONAL PROBLEMS WITHOUT EXTRANEOUS THEORECTICAL MATERIAL.

AVAILABILITY: ELSEVIER SCIENCE PUBLISHING CO., INC., 52 VANDERBILT AVE., NEW YORK, NY 10017.

IRIS ACCESSION NUMBER: EW011069

PUBLICATION DATE: MAY 84

TITLE: SOCIAL INSTITUTIONS INFLUENCING LAND APPLICATION OF

WASTEWATER AND SLUDGE.

PERSONAL AUTHOR: FORSTER, D. L.; SOUTHGATE, D. D.

DESCRIPTOR: *CONSTRAINTS; *ENVIRONMENT; *LAND APPLICATION; *LEGISLATION; *PUBLIC ATTITUDES; *REGULATIONS; *SOCIAL CONSTRAINTS; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER

DESCRIPTIVE NOTE: 399-404P.

ABSTRACT: THIS PAPER REVIEWS THE VARIETY OF SOCIAL AND REGULATORY CONSTRAINTS ON LAND APPLICATION PROGRAMS. ALSO SUMMARIZED ARE LESSONS THAT HAVE BEEN LEARNED ABOUT CHANGING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011070

PUBLICATION DATE: MAY 84

TITLE: WPCF REPORTS ON SLUDGE AND WASTEWATER DISINFECTION.

DESCRIPTOR: *COMMITTEE REPORTS; *DISINFECTION; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *WPCF; *WASTEWATER TREATMENT; *WATER TREATMENT

DESCRIPTIVE NOTE: 405-07P.

ABSTRACT: THIS IS A COMMITTEE REPORT OF THE WPCF DISINFECTION COMMITTEE ON SLUDGE AND WASTEWATER DISINFECTION. THE REPORT CONTAINS A REVIEW OF THE FINDINGS AND CONCLUSIONS OF MAJOR SLUDGE DISINFECTION STUDIES AND THE REGULATORY BACKGROUND CONCERNING PATHOGEN CONTROL, THE ADVANTAGES AND DISADVANTAGES OF VARIOUS WASTEWATER DISINFECTION METHODS, AND THE ENVIRONMENTAL AND PUBLIC HEALTH SIGNIFICANCE OF THE VARIOUS DISINFECTANTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011071

PUBLICATION DATE: MAY 84

TITLE: AN INNOVATIVE APPROACH TO PLANNED MAINTENANCE.

PERSONAL AUTHOR: LYLES, BARBARA D.

DESCRIPTOR: *MAINTENANCE; *MONITORING; *PREVENTIVE MAINTENANCE; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 408-16P.

ABSTRACT: THE MANY BENEFITS OF ENGINEERED PREVENTIVE MAINTENANCE HAVE BEEN WELL DOCUMENTED, INCLUDING ITS EASY ADAPTABILITY TO PERFORMANCE MONITORING. THIS PAPER EXAMINES THE PREREQUISITES OF A SUCCESSFUL PLANNED MAINTENANCE SYSTEM.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011072

PUBLICATION DATE: MAY 84

TITLE: METALS DISTRIBUTIONS IN ACTIVATED SLUDGE SYSTEMS.

PERSONAL AUTHOR: PATTERSON, JAMES W.; KODUKULA, PRASAD S.

DESCRIPTOR: *ACTIVATED SLUDGE; *HEAVY METALS; *METALS; *MODELS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 432-41P.

ABSTRACT: EMPIRICAL MODELS BASED ON CONTROLLED PILOT PLANT STUDIES CAN CONFIDENTLY PREDICT THE REMOVAL OF METALS BY THE ACTIVATED SLUDGE PROCESS. THIS PAPER DESCRIBES TWO SUCH MODELS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011073

PUBLICATION DATE: MAY 84

TITLE: IDENTIFICATION AND SIGNIFICANCE OF FILAMENTOUS MICROORGANISMS IN ACTIVATED SLUDGE.

PERSONAL AUTHOR: STROM, PETER F.; JENKINS, DAVID

DESCRIPTOR: *ACTIVATED SLUDGE; *BULKING; *FILAMENTOUS MICROORGANISMS; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 449-59P.

ABSTRACT: THIS PAPER PRESENTS THE RESULTS OF A STUDY IN WHICH A RELATIONSHIP WAS ESTABLISHED BETWEEN FILAMENTOUS MICROORGANISMS AND WASTEWATER CHARACTERISTICS AND OPERATING CONDITIONS. MOST OF THE 226 SAMPLES OBTAINED FROM 78 PLANTS COULD BE CLASSIFIED INTO GROUPS THAT CORRELATED WITH THE OPERATING CONDITIONS IN WHICH THEY PREDOMINATED. SUGGESTIONS FOR BULKING CONTROL ARE GIVEN.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011074

PUBLICATION DATE: MAY 84

TITLE: RAPID BOD MEASUREMENT FOR MUNICIPAL WASTEWATER

SAMPLES USING A BIOFILM ELECTRODE.

PERSONAL AUTHOR: STRAND, STUART E.; CARLSON, DALE A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BOD MEASUREMENTS; *BOD; *BIOFILM ELECTRODES; *LABORATORY PROCEDURES; *WASTEWATER; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 464-67P.

ABSTRACT: THE PURPOSE OF THIS RESEARCH WAS TO COMPARE THE RESPONSE OF THE BIOFILM ELECTRODE WITH THE CONVENTIONAL 5-DAY BOD TEST. A BIOFILM ELECTRODE MAY BE MORE RELIABLE THAN OTHER TECHNIQUES BECAUSE ANEROBIC CONDITIONS CAN BE DETECTED AS SOON AS THEY DEVELOP.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011075

PUBLICATION DATE: MAY 84

TITLE: REMOVAL OF SILVER AND MERCURY FROM SPENT COD TEST SOLUTIONS.

PERSONAL AUTHOR: HENDRICKSON, KRISTY J.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *COD; *COSTS; *LABORATORY PROCEDURES; *MERCURY; *METALS; *METAL RECOVERY; *SILVER; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 468-73P.

ABSTRACT: THE CHEMICAL OXYGEN DEMAND TEST USES SILVER AND MERCURY. SILVER AND MERCURY CAN BE RECOVERED IN FORMS SUITABLE FOR REUSE, BUT THE RESIDUAL WASTE MUST BE DILUTED PRIOR TO DISPOSAL.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011076

PUBLICATION DATE: MAY 84

TITLE: IRRIGATION OF PUBLIC USE AREAS BY LAND APPLICATION OF COMBINED INDUSTRIAL AND DOMESTIC WASTE EFFLUENT.

PERSONAL AUTHOR: SLOAN, WILLIAM H.

DESCRIPTOR: *EFFLUENTS; *IRRIGATION; *INDUSTRIAL WASTES; *LAND APPLICATION; *MUNICIPAL WASTES; *OPERATIONS (WASTEWATER); *REGULATIONS; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 474-81P.

ABSTRACT: ALTHOUGH AIMED AT MEETING REGULATORY REQUIREMENTS THE PROJECT DESCRIBED WILL REDUCE WITHDRAWLS FROM A SURFACE

AQUIFER AND ALSO RECHARGE IT WITH HIGH-QUALITY EFFLUENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N5

IRIS ACCESSION NUMBER: EW011079

PUBLICATION DATE: MAY 84

TITLE: MILWAUKEE METRO MANAGEMENT TAKES ON AN INDUSTRIAL COMPLEX.

PERSONAL AUTHOR: HERSCH, PAUL

DESCRIPTOR: *ADMINISTRATION; *COMMUNICATIONS; *MANAGEMENT; *MANAGEMENT BY OBJECTIVES; *OPERATIONS (WASTEWATER); *PERSONNEL; *UTILITIES; *WISCONSIN; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 30P.

ABSTRACT: DESCRIBED IS MILWAUKEE METRO'S MANAGEMENT PATTERN. THE ORGANIZATION STRESSES MANAGEMENT BY OBJECTIVES, FEEDBACK, AND PARTICIPATORY MANAGEMENT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N5

IRIS ACCESSION NUMBER: EW011080

PUBLICATION DATE: MAY 84

TITLE: A MANAGEMENT SYSTEM FOR COST CONTROL.

PERSONAL AUTHOR: TAYLOR, THOMAS E.; RENFRO, JACK

DESCRIPTOR: *COSTS; *COST CONTROLS; *MANAGEMENT; *PROGRAM DESCRIPTIONS; *UTILITIES; *WASTEWATER TREATMENT; *WATER TREATMENT; *TEXAS

DESCRIPTIVE NOTE: 37-39P.

ABSTRACT: AN EFFICIENT SELF-SUFFICIENT WATER OR WASTEWATER UTILITY NEEDS, AMONG OTHER MANAGEMENT ATTRIBUTES, SOUND COST CONTROL. SOME OF THE PROCEDURES USED IN DALLAS, TEXAS ARE DESCRIBED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N5

IRIS ACCESSION NUMBER: EW011081

PUBLICATION DATE: MAY 84

TITLE: MATCHING MICROCOMPUTERS AND THE TASKS THEY DO BEST.

PERSONAL AUTHOR: DAY, MICHAEL D.

DESCRIPTOR: *AUTOMATED CONTROLS; *COMPUTERS; *COMPUTER APPLICATIONS; *COSTS; *DATA PROCESSING; *LABORATORY PROCEDURES; *MICROCOMUTERS; *MANAGEMENT; *PLANNING;

*RECORDS; *UTILITIES

DESCRIPTIVE NOTE: 40-42P.

ABSTRACT: WITH CAREFUL EVALUATION, SELECTION, AND IMPLEMENTATION MICROCOMPUTERS CAN BE COST-EFFECTIVE TOOLS. EXAMPLES OF USEFUL TASKS ARE CONSIDERED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N5

IRIS ACCESSION NUMBER: EW011082

PUBLICATION DATE: MAY 84

TITLE: TREATING AND MONITORING CORROSION AND SCALE IN DISTRIBUTION SYSTEMS.

PERSONAL AUTHOR: BOFFARDI, B. P.; SCHWEITZER, G. W.

DESCRIPTOR: *CORROSION; *CORROSION INHIBITORS; *MONITORING; *SCALE; *WATER DISTRIBUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 48-50P.

ABSTRACT: RED WATER COMPLAINTS HAVE LONG BEEN A PROBLEM OF WATER UTILITIES. PROBLEMS ARE NOW UNDERSTOOD AND TREATMENT PROCESSES ARE AVAILABLE. SEVERAL SOLUTIONS ARE CONSIDERED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N5

IRIS ACCESSION NUMBER: EW011083

PUBLICATION DATE: MAY 84

TITLE: WATER MAIN PROJECT SERVES EXPANDING HI-TECH AREA.

PERSONAL AUTHOR: BUTLER, JAMES R.; ROBERTS, JOHN L.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *PLANNING; *PIPES; *WATER DISTRIBUTION; *WATER MAINS; *WATER SUPPLY

DESCRIPTIVE NOTE: 52-53P.

ABSTRACT: THROUGH EVALUATION OF TRANSMISSION PIPE MATERIALS, PREPARATION OF THE SPECIFICATION AND PROPER PIPE ALIGNMENT CONTRIBUTED TO ACHIEVING LONG-TERM INTEGRITY OF A NEW WATER MAIN SYSTEM FOR RALEIGH, NORTH CAROLINA.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N5

IRIS ACCESSION NUMBER: EW011084

PUBLICATION DATE: APR 79

TITLE: WATER PURIFICATION, DISTRIBUTION AND SEWAGE DISPOSAL. APPROPRIATE TECHNOLOGIES FOR DEVELOPMENT. REPRINT R-29.

PERSONAL AUTHOR: PEACE CORPS, WASHINGTON, DC. INFORMATION COLLECT.

DESCRIPTOR: *CONSTRUCTION (PROCESS); DEVELOPING NATIONS; DESIGN REQUIREMENTS; POSTSECONDARY EDUCATION; PUBLIC HEALTH; *TRAINING; *TOILET FACILITIES; *WASTE DISPOSAL; WASTEWATER TREATMENT; SANITATION; WATER TREATMENT; WATER SUPPLY; WATER DISTRIBUTION

ABSTRACT: THIS DOCUMENT, DESIGNED TO SERVE AS A TRAINING MANUAL FOR TECHNICAL INSTRUCTORS AND AS A FIELD RESOURCE REFERENCE FOR PEACE CORPS VOLUNTEERS, CONSISTS OF NINE UNITS. UNIT TOPICS FOCUS ON: (1) WATER SUPPLY SOURCES; (2) WATER TREATMENT; (3) PLANNING WATER DISTRIBUTION SYSTEMS; (4) CHARACTERISTICS OF AN ADEQUATE SYSTEM; (5) CONSTRUCTION TECHNIQUES; (6) OPERATION AND MAINTENANCE OF A DISTRIBUTION AND TREATMENT SYSTEM; (7) SCOPE OF DISPOSAL SYSTEM PROJECTS IN HOST COMMUNITIES; (8) THE PRIVY METHOD OF EXCRETA DESIGN FOR A VILLAGE; AND (9) WATER CARRIED SEWAGE SYSTEMS CONSTRUCTION AND MAINTENANCE. EACH UNIT INCLUDES: AN OVERVIEW (STATEMENT SUMMARIZING SIGNIFICANCE OF MATERIAL TO FOLLOW AND POINTS REQUIRING SPECIAL EMPHASIS); AN OBJECTIVE (DEFINITION OF GOAL TO BE ACHIEVED); LISTS OF TASKS (STEPS FOLLOWED TO ACCOMPLISH OBJECTIVES), FUNCTIONAL SKILLS (KNOWLEDGE SKILLS NEEDED TO PERFROM TASKS), AND TERMINAL PERFORMANCE OBJECTIVES; CONTENT INFORMATION DESCRIBING THE KNOWLEDGE AND SKILLS NEEDED TO PERFORM TASKS CORRECTLY; AND LESSON PLANS.

AVAILABILITY: PEACE CORPS, INFORMATION COLLECTION & EXCHANGE, OFFICE OF PROGRAMMING AND TRAINING, 806 CONNECTICUT AVE., NW, WASHINGTON, DC 20526

IRIS ACCESSION NUMBER: EW011085

PUBLICATION DATE: 81

TITLE: ANALYSIS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER SYSTEMS.

PERSONAL AUTHOR: FUTOMA, DAVID J.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AROMATIC HYDROCARBONS; *HYDROCARBONS; *LABORATORY PROCEDURES; *INSTRUCTIONAL MATERIALS; *ORGANIC COMPOUNDS; *POSTSECONDARY EDUCATION; *WATER

DESCRIPTIVE NOTE: 200P. CATALOG # 6255TE; PRICE: $66.00

ABSTRACT: THE SEPARATION AND ANALYSIS OF POLYCYCLIC AROMATIC HYDROCARBONS IN WATER IS CRITICALLY SURVEYED. SAMPLING AND PRE-CONCENTRATION METHODS SUCH AS LIQUID-LIQUID EXTRACTION, HEAD SPACE ANALYSIS, FREEZE DRYING, STEAM DISTILLATION AND REVERSE OSMOSIS ARE DISCUSSED AND EVALUATED FOR THEIR SPEED, REPRODUCIBILITY AND ACCURACY. SPECIAL ATTENTION IS GIVEN TO THE CONCENTRATION OF VERY DILUTE SOLUTIONS OF POLYCYCLIC AROMATIC HYDROCARBONS BY ADSORPTION ON CARBON AND POLYMER SURFACES. METHODS OF ANALYSIS CURRENTLY USED SUCH AS HIGH PRESSURE LIQUID CHROMATOGRAPHY WITH OPTICAL DETECTION, GAS CHROMATOGRAPHY WITH FLAME IONIZATION DETECTION, THIN LAYER CHROMATOGRAPHY WITH FLUORESCENT DETECTION, AND GAS CHROMATOGRAPHY/MASS

SPECTROMETRY TECHNIQUES ARE DISCUSSED. COLUMN PACKINGS AND CAPILLARY CHROMATOGRAPHY ARE ANALYZED, AS WELL AS THE LESS WIDELY USED APPROACHES OF LOW TEMPERATURE FLUORESCENCE AND PHOSPHORESCENCE, MATRIX ISOLATION FT-IR, WAVE-LENGTH MODULATION, AND DERIVATIVE SPECTROSCOPY.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N.W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011086

PUBLICATION DATE: MAR 84

TITLE: TREATMENT OF LEACHATE. 1977-1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *LEACHATE; *LANDFILLS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 76P. PRICE CODE: PB84-862564; PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING TREATABILITY STUDIES ON LEACHATE FROM LANDFILLS AND SOLID WASTE DISPOSAL SITES. BIOLOGICAL TREATMENT, CHEMICAL COAGULATION, CARBON ADSORPTION, RESIN ADSORPTION, MEMBRANE PROCESSES, AND STRIPPING ARE SOME OF THE TREATMENT SYSTEMS DISCUSSED. (CONTAINS 65 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011091

PUBLICATION DATE: 84

TITLE: TARGETING ECONOMIC INCENTIVES FOR ENVIRONMENTAL PROTECTION.

PERSONAL AUTHOR: NICHOLS, ALBERT L.

DESCRIPTOR: *ECONOMICS; *ENVIRONMENT; *ENVIRONMENTAL PROTECTION; *ENVIRONMENTAL REGULATION; *INCENTIVES; *POLICIES; *POLLUTION CONTROL; *REGULATIONS

DESCRIPTIVE NOTE: 207P. PRICE: $22.50

ABSTRACT: ECONOMISTS HAVE LONG ARGUED THAT ENVIRONMENTAL REGULATION SHOULD RELY LESS ON COMMAND AND CONTROL APPROACHES THAT EMPLOY UNIFORM STANDARDS AND MORE ON ECONOMIC INCENTIVES SUCH AS EMISSION CHARGES AND MARKETABLE EMISSION PERMITS. THIS BOOK APPROACHES THE INCENTIVES VS. STANDARDS DEBATE BY SHOWING HOW DIFFERENT TARGETS (THE POINTS AT WHICH INCENTIVES ARE APPLIED) AFFECT THE ABILITY OF REGULATION TO PROVIDE ENVIRONMENTAL PROTECTION AT LOWEST POSSIBLE COST. IN PARTICULAR, IT ARGUES THAT SCHOLARS AND REGULATORS BOTH HAVE PAID INSUFFICIENT ATTENTION TO DEVELOPING STRATEGIES THAT ARE SENSITIVE TO MAJOR VARIATIONS ACROSS PLANTS IN THE BENEFITS OF CONTROLLING EMISSIONS. THE BOOK DEVELOPS A THEORY THAT SHOWS HOW THE CHOICE OF TARGET INTERACTS WITH THE CHARGE OR STANDARD IN DETERMINING THE NET BENEFITS OF REGULATION. THIS CONCEPTUAL FRAMEWORK IS APPLIED TO A CASE STUDY OF PROPOSED REGULATIONS FOR CHEMICAL PLANTS THAT EMIT BENZENE, WHICH IS A SUSPECTED CAUSE OF LEUKEMIA. IT REVEALS THAT A CHARGE TARGETED ON EXPOSURE WOULD PERFORM MUCH BETTER THAN EITHER AN EMISSION STANDARD OR THE TYPE OF UNIFORM EMISSION CHARGE USUALLY ADVOCATED BY ECONOMISTS.

AVAILABILITY: MIT PRESS, 28 CARLETON ST., MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA 02142

IRIS ACCESSION NUMBER: EW011092

TITLE: ORGANIC TRACE ANALYSIS BY LIQUID CHROMATOGRAPHY.

PERSONAL AUTHOR: LAWRENCE, JAMES F.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY; *INSTRUCTIONAL MATERIALS; *LIQUID CHROMATOGRAPHY; *LABORATORY PROCEDURES; *ORGANIC CHEMISTRY; *ORGANIC COMPOUNDS; *TRACE ANALYSIS

DESCRIPTIVE NOTE: 284P. PRICE: $41.00

ABSTRACT: DURING THE PAST DECADE, MODERN HIGH PERFORMANCE LIQUID CHROMATOGRAPHY HAS EXPANDED GREATLY. THIS BOOK INTRODUCES TO ANALYTICAL CHEMISTS THE APPLICATION OF LC TO TRACE ANALYTICAL PROBLEM SOLVING. IT EMPHASIZES THE PRACTICAL ASPECTS, INCLUDING: EQUIPMENT REQUIREMENTS, SAMPLE PRETREATMENT, SAMPLE INTRODUCTION, MODES OF CHROMATOGRAPHY, CHEMICAL DERIVATION REACTIONS, APPROACHES TO ROUTINE ANALYSIS, AND AUTOMATION. MANY PRACTICAL APPLICATIONS FROM THE RECENT LITERATURE ARE DISCUSSED. THIS IS THE ONLY LC BOOK COMPLETELY DEVOTED TO ORGANIC TRACE ANALYSIS.

AVAILABILITY: ACADEMIC PRESS, INC., P.O. BOX 733, OLD CHELSEA STATION, NEW YORK, NY 10113

IRIS ACCESSION NUMBER: EW011093

PUBLICATION DATE: JUN 84

TITLE: HOW TO PLAN FOR HUMAN RESOURCES DEVELOPMENT.

PERSONAL AUTHOR: DREXLER, ALLAN B.; LEWIS, BRIAN J.

DESCRIPTOR: EVALUATION; HUMAN RESOURCES DEVELOPMENT; PERSONNEL; PLANNING; TRAINING

DESCRIPTIVE NOTE: 112-14P.

ABSTRACT: DESCRIBED IS A PLAN FOR IN-HOUSE TRAINING AND DEVELOPMENT OF HUMAN RESOURCE SKILLS. A SUCCESSFUL SYSTEM FOR HUMAN RESOURCE DEVELOPMENT EMBRACES FOUR MAJOR ELEMENTS: (1) DEVELOP A PERFORMANCE PLAN; (2) CARRY OUT PROGRESS REVIEWS; (3) CONDUCT A FORMAL APPRAISAL; AND (4) CONSTRUCT A DEVELOPMENT PLAN.

AVAILABILITY: CONSULTING ENGINEER; V62 N6

IRIS ACCESSION NUMBER: EW011094

PUBLICATION DATE: JUN 84

TITLE: CHLORINE TOLERANT BACTERIA IN A WATER DISTRIBUTION SYSTEM.

PERSONAL AUTHOR: CLARK, THOMAS F.

DESCRIPTOR: *BACTERIA; *DISINFECTION; *DRINKING WATER; *CHLORINE-TOLERANT BACTERIA; *OPERATIONS (WATER); *PUBLIC HEALTH; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 65-67P.

ABSTRACT: PROVIDED IS A REVIEW OF THE RESPONSE TO INCIDENTS OF COLIFORM BACTERIA DETECTION IN A WATER DISTRIBUTION SYSTEM IN NEW YORK.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011095

PUBLICATION DATE: JUN 84

TITLE: SIMPLIFYING STORMWATER DETENTION BASIN DISCHARGE CONTROL DETERMINATIONS.

PERSONAL AUTHOR: MCKINNON, RONALD J.

DESCRIPTOR: *DETENTION BASINS; *DETENTION FACILITIES; *MATHEMATICAL FORMULAS; *MODELS; *OUTFLOW; *STORM DRAINAGE; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 68-69P.

ABSTRACT: MATHEMATICAL FORMULAS ARE CHARTED TO RELATE OUTFLOW FROM A DETENTION BASIN WITH HEAD AND PIPE SIZE.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011096

PUBLICATION DATE: JUN 84

TITLE: RENOVATION OF A MAJOR RESERVOIR.

PERSONAL AUTHOR: MAKE, GARY R.: LILLEY, RICHARD J., JR.

DESCRIPTOR: *MAINTENANCE; *RENOVATIONS; *RESERVOIRS; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 70-73P.

ABSTRACT: DESCRIBED IS THE RENOVATION OF A 70 YEAR OLD CONCRETE RESERVOIR IN NEW YORK.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011097

PUBLICATION DATE: JUN 84

TITLE: STORM WATER DETENTION/RETENTION: A NEW SOLUTION.

PERSONAL AUTHOR: GODDARD, JAMES B.

DESCRIPTOR: *DETENTION; *DRAINAGE; *GROUNDWATER; *GROUNDWATER RECHARGE; *SOUTH CAROLINA; *STORMWATER; *SURFACE RUNOFF; *WASTEWATER COLLECTION; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 82-83P.

ABSTRACT: DESCRIBED IS A DESIGN METHOD THAT CAN BE USED TO INCORPORATE THE SUBSURFACE DRAINAGE SYSTEM INTO A DETENTION/GROUNDWATER RECHARGE SYSTEM.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011098

PUBLICATION DATE: JUN 84

TITLE: TECHNICAL NOTES FOR STORM WATER RETENTION AND DISPOSAL.

DESCRIPTOR: DESIGN; *DETENTION; *DRAINAGE; *STORMWATER; *STORMWATER RETENTION; *SURFACE RUNOFF; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 84-85P.

ABSTRACT: THIS ARTICLE INCLUDES A NUMBER OF TECHNICAL NOTES RELATED TO STORM WATER RETENTION AND DISPOSAL. INCLUDED ARE VARIOUS ITEMS TO CONSIDER IN THE DESIGN OF STORM WATER RETENTION AND DISPOSAL SYSTEMS.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011099

PUBLICATION DATE: JUN 84

TITLE: WATER PLANT SERVES TWO MASTERS.

PERSONAL AUTHOR: MAASS, ARTHUR E.; AND OTHERS

DESCRIPTOR: *DESIGNS; *FACILITIES; *INDUSTRY; *MUNICIPALITIES; *OPERATIONS (WATER); *PLANNING; *WATER NEEDS; *WATER TREATMENT; *WATER SUPPLY

DESCRIPTIVE NOTE: 86-87P.

ABSTRACT: A PROGRAM INCLUDING AUTOMATION AND ENERGY CONSERVATION MEASURES SAVE MORE THAN $300,000 PER YEAR IN OPERATION COSTS AT A MICHIGAN PLANT THAT SERVES BOTH INDUSTRIAL AND DOMESTIC CUSTOMERS.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011100

PUBLICATION DATE: JUN 84

TITLE: THE KEY TO EFFECTIVE I/I CONTROL.

PERSONAL AUTHOR: STEKETEE, C. H.; HEINECKE, THOMAS L.

DESCRIPTOR: *INFILTRATION; *INFLOW; *MAINTENANCE; *MONITORING; *REHABILITATION; *SERVICE LATERALS; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 88-92P.

ABSTRACT: REPORTED ARE THE RESULTS OF AN EXTENSIVE STUDY AND REHABILITATION EFFORT THAT DEMONSTRATE THE IMPORTANCE OF SERVICE LATERAL REPAIRS IN I/I REDUCTION PROJECTS.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011101

PUBLICATION DATE: JUN 84

TITLE: PREPARING THE DATA BASE FOR A WATER NETWORK ANALYSIS.

PERSONAL AUTHOR: JOCHIM, DAVID A.; DAVIS, WALTER E., JR.

DESCRIPTOR: *DATA COLLECTION; *HYDRAULIC ANALYSIS *MODELS; *NETWORK ANALYSIS; *PLANNING; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER USE; *WATER NEEDS

DESCRIPTIVE NOTE: 93-95P.

ABSTRACT: A COMPUTER MODEL ENABLED DEVELOPMENT OF A DATA BASE NEEDED FOR ANALYSIS OF HYDRAULIC DEFICIENCIES IN A WATER DISTRIBUTION SYSTEM.

AVAILABILITY: PUBLIC WORKS; V115 N6

IRIS ACCESSION NUMBER: EW011102

PUBLICATION DATE: JUN 84

TITLE: IS OUR DRINKING WATER SAFE?

PERSONAL AUTHOR: DYKSEN, JOHN E.

DESCRIPTOR: *CHEMICALS; *CONTAMINATION; *DRINKING WATER; *GROUNDWATER; *VOLATILE CHEMICALS; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 26-27,30P.

ABSTRACT: VOLATILE CHEMICALS ARE CONTAMINATING GROUND WATER SUPPLIES THROUGH ACCIDENTAL SPILLS, LANDFILL LEACHING, AND IMPROPER DISPOSAL METHODS.

AVAILABILITY: AMERICAN CITY AND COUNTY; V99 N6

IRIS ACCESSION NUMBER: EW011104

PUBLICATION DATE: JUN 84

TITLE: NEW METERS FLUSH OUT UNACCOUNTED-FOR WATER.

DESCRIPTOR: *ACCOUNTING; *CONSERVATION; *COSTS; *METERS; *WATER RATES; *WATER DEMAND; *WATER METERS; *WATER SUPPLY

DESCRIPTIVE NOTE: 36,38P.

ABSTRACT: NEW METERS FLUSH OUT UNACCOUNTED-FOR WATER IN A GEORGIA COMMUNITY. AGING METERS HAD DECLINED IN ACCURACY OR HAD STOPPED WORKING ALTOGETHER.

AVAILABILITY: AMERICAN CITY AND COUNTY; V99 N6

IRIS ACCESSION NUMBER: EW011105

PUBLICATION DATE: JUN 84

TITLE: INCENTIVES SPUR SAFETY EFFORTS.

PERSONAL AUTHOR: WILKES, T.

DESCRIPTOR: *ACCIDENT PREVENTION; *INCENTIVES; *MANAGEMENT; *PEER PRESSURE; *SAFETY; *SAFETY PROGRAMS; *WATER TREATMENT

DESCRIPTIVE NOTE: 40P.

ABSTRACT: INCENTIVES SPUR SAFETY EFFORTS IN PEORIA, ILLINOIS. INCENTIVES INCLUDE TIME-OFF AND MERCHANDISE.

AVAILABILITY: AMERICAN CITY AND COUNTY; V99 N6

IRIS ACCESSION NUMBER: EW011109

PUBLICATION DATE: 84

TITLE: MODELING WATER DEMANDS.

PERSONAL AUTHOR: KINDLER, JANUSZ, ED.; RUSSELL, CLIFFORD S.

DESCRIPTOR: *AGRICULTURE; *ANALYTICAL TECHNIQUES; *INDUSTRY; *MANAGEMENT; *MODELS; *MUNICIPALITIES; *WATER DEMAND; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 264P. PRICE: $28.00

ABSTRACT: THIS VOLUME IS DIRECTED PRIMARILY TOWARD ANALYSTS RESPONSIBLE FOR GENERATING INFORMATION ON WATER DEMANDS IN RELATION TO PLANNING DECISIONS IN WATER RESOURCES MANAGEMENT. BECAUSE BY DEFINITION THIS IS AN INTERDISCIPLINARY TASK, THE AUDIENCE OF THE BOOK MAY BE EXPECTED TO CONSIST OF PERSONS WITH DIVERSE PROFESSIONAL BACKGROUNDS, SUCH AS HYDROLOGISTS, WATER RESOURCES PLANNERS, EXPERTS IN THE TECHNOLOGY OF WATER USE (INDUSTRIAL, AGRICULTURAL, OR MUNICIPAL), ECONOMISTS, AND SYSTEMS ANALYSTS THAT LARGELY, ALTHOUGH NOT EXCLUSIVELY, ARE WORKING WITHIN WATER MANAGEMENT OR REGIONAL DEVELOPMENT AGENCIES. CONTENTS INCLUDE: (1) WATER DEMAND; (2) METHODOLOGICAL FRAMEWORK; (3) INDUSTRIAL WATER DEMANDS; (4) AGRICULTURAL WATER DEMANDS; (5) MUNICIPAL WATER DEMANDS; (6) PROGRAMMING MODELS FOR REGIONAL WATER DEMAND ANALYSIS; (7) THE NATIONAL PERSPECTIVE IN WATER DEMAND MODELING; AND (8) SUMMARY AND REFLECTIONS.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821

IRIS ACCESSION NUMBER: EW011110

PUBLICATION DATE: 80

TITLE: PRINCIPLES OF DESALINATION. PART A. SECOND EDITION.

PERSONAL AUTHOR: SPIEGLER, K. S. ED.; LAIRD, A. D. K., ED.

DESCRIPTOR: *DESALINATION; *DISTILLATION; *ELECTRODIALYSIS; *OPERATIONS (WATER); *SEA WATER; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 384P. PRICE: $47.50

ABSTRACT: THIS IS PART I OF TWO VOLUMES. CONTENTS INCLUDE: (1) THERMOECONOMIC CONSIDERATIONS OF SEA WATER DEMINERALIZATION; (2) FUNDAMENTALS OF DISTILLATION; (3) DESIGN OF DISTILLING PLANTS; (4) VAPOR REHEAT DISTILLATION; (5) DUAL PURPOSE PLANTS; AND (6) ELECTRODIALYSIS. EACH CHAPTER INCLUDES REFERENCES.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821

IRIS ACCESSION NUMBER: EW011113

PUBLICATION DATE: 83

TITLE: ADVANCES IN IRRIGATION. VOLUME 2.

PERSONAL AUTHOR: HILLEL, DANIEL, ED.

DESCRIPTOR: *AGRICULTURE; *IRRIGATION; *MANAGEMENT; *WATER NEEDS; *WATER USE

DESCRIPTIVE NOTE: 448P. PRICE: $59.00

ABSTRACT: CONTENTS INCLUDE: (1) IRRIGATION SCHEDULING

ALLIED TIMING CRITERIA; (2) ENERGY UTILIZATION AND MANAGEMENT IN IRRIGATION; (3) CROP-WATER PRODUCTION FUNCTIONS; (4) IRRIGATION IN AUSTRALIA: DEVELOPMENT AND PROSPECTS; (5) APPLICATION OF A PLANT-ENVIRONMENT MODEL PROBLEMS IN IRRIGATION; (6) TECHNIQUES FOR ESTIMATING IRRIGATION WATER REQUIREMENTS; (7) ECONOMIC ANALYSIS OF FARM IRRIGATION USING RESPONSE FUNCTIONS OF CROPS; (8) IRRIGATION SCHEDULING BASED ON DYNAMIC CROP RESPONSE MODEL; (9) A MODEL OF ROOT GROWTH AND WATER UPTAKE ACCOUNTING FOR PHOTOSYNTHESIS, RESPIRATION, TRANSPIRATION, AND SOIL HYDRAULICS; AND (10) EVAPOTRANSPIRATION OBTAINED FROM REMOTE SENSING METHODS.

AVAILABILITY: ACADEMIC PRESS, INC., 6277 SEA HARBOR DRIVE, ORLANDO, FL 32821

IRIS ACCESSION NUMBER: EW011114

PUBLICATION DATE: 71

TITLE: CRC HANDBOOK OF LABORATORY SAFETY. SECOND EDITION.

PERSONAL AUTHOR: STEERE, NORMAN, ED.

DESCRIPTOR: *ACCIDENT PREVENTION; *CHEMICALS; *ELECTRICITY; *FIRE; *EQUIPMENT; *HANDBOOKS; *LABORATORY SAFETY; *RADIATION; *SAFETY; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 864P. CATALOG NO.: 0352TE; PRICE: $59.95

ABSTRACT: THIS 2ND EDITION INCORPORATES 17 NEW, IMPORTANT CHAPTERS. FIRST EDITION CHAPTERS ARE REVISED AND ENLARGED, INCLUDING CPR, DOSE TO BODY ORGANS FROM INHALATION OR INGESTION OF SOLUBLE RADIONUCLIDES, AND DESIGN OF FACILITIES FOR MICROBIOLOGICAL SAFETY.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N.W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011115

PUBLICATION DATE: 84

TITLE: BIOLOGICAL EFFECTS OF ORGANOLEAD COMPOUNDS.

PERSONAL AUTHOR: GRANDJEAN, PHILIPPE, ED.

DESCRIPTOR: *AIR POLLUTION; *AQUATIC ENVIRONMENT; *ENVIRONMENTAL HEALTH; *ENVIRONMENTAL POLLUTION; *LEAD; *ORGANIC COMPOUNDS; *ORGANOLEAD COMPOUNDS; *PUBLIC HEALTH; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 288P. CATALOG NO.: 5309TE; PRICE: $84.00

ABSTRACT: ORGANOLEAD COMPOUNDS PLAY AN IMPORTANT ROLE IN ENVIRONMENTAL POLLUTION. THIS BOOK IS AN EXTENSIVE REVIEW ON THIS SIGNIFICANT ENVIRONMENTAL HEALTH PROBLEM. THE SOURCES AND OCCURRENCE OF ENVIRONMENTAL ORGANOLEAD CONTAMINATION ARE

REVIEWED. THE BIOTRANSFORMATION, BIOCHEMICAL AND MORPHOLOGICAL EFFECTS ARE DESCRIBED IN DETAIL WITH EXTENSIVE ELECTRON MICROGRAPHS AND EXPERIMENTAL RESULTS. HUMAN EXPOSURES AND INTOXICATIONS ARE EXAMINED, AND THE HEALTH SIGNIFICANCE OF ORGANOLEAD POLLUTION IS DISCUSSED.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N.W. BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011116

PUBLICATION DATE: 82

TITLE: CRC HANDBOOK OF IDENTIFIED CARCINOGENS AND NONCARCINOGENS: CARCINOGENICITY-MUTAGENICITY DATABASE.

PERSONAL AUTHOR: SODERMAN, JEAN V., ED.

DESCRIPTOR: *CARCINOGENS; *CHEMICALS; *ORGANIC COMPOUNDS; *NONCARCINOGENS; *REFERENCES; *RESEARCH

DESCRIPTIVE NOTE: 1336P. CATALOG NO: 3200TE; PRICE: 2-VOLUME SET $295.00

ABSTRACT: THESE DESK-TOP REFERENCES CATALOG SUBSTANCES KNOWN TO BE CARCINOGENIC AND NONCARCINOGENIC, AND FURTHER INDICATE WHICH ARE GENOTOXIC BASED ON THE CRITICAL EVALUATIONS OF HUMAN EPIDEMIOLOGICAL AND ANIMAL STUDIES PERFORMED BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) OR BY THE NATIONAL CANCER INSTITUTE (NCI). THE CHEMICAL CLASS FILE AND TARGET ORGAN FILE, COMPILED WITH THE AID OF A COMPUTER, CATAGORIZE CHEMICALS, GIVE TEST RESULTS, AND DESCRIBE THE ORGANS, THE EFFECTS, AND THE ROUTES BY WHICH THE CHEMICAL TRAVELS. ALSO LISTED ARE THE CHEMICAL STRUCTURE, AND SUBSTRUCTURE CLASSIFICATION. INDEXES LIST ALL 890 COMPOUNDS AND TARGET ORGANS MAKING THE INFORMATION EASILY ACCESSIBLE.

AVAILABILITY: CRC PRESS, INC., 2000 CORPORATE BLVD., N.W., BOCA RATON, FL 33431

IRIS ACCESSION NUMBER: EW011117

PUBLICATION DATE: 83

TITLE: MANAGING CHEMICALS IN THE 1980'S

DESCRIPTOR: *CHEMICALS; *CHEMICAL INDUSTRY; *ENVIRONMENTAL HAZARDS; *HEALTH; *INDUSTRY; *MANAGEMENT; *OCCUPATIONAL HEALTH; *PUBLIC HEALTH

DESCRIPTIVE NOTE: 123P. PRICE: $12.00

ABSTRACT: EXAMINES WAYS OF MANAGING ANY HEALTH OR ENVIRONMENTAL HAZARD ASSOCIATED WITH CHEMICALS WHILE MAINTAINING A VIGOROUS INTERNATIONAL CHEMICALS INDUSTRY.

AVAILABILITY: OECD PUBLICATIONS AND INFORMATION CENTER, 1750 PENNSYLVANIA AVE., N.W., SUITE 1207, WASHINGTON, DC 20006

IRIS ACCESSION NUMBER: EW011118

PUBLICATION DATE: 82

TITLE: THE COST OF OIL SPILLS.

DESCRIPTOR: *ECONOMICS; *ENVIRONMENTAL IMPACT; *OIL SPILLS; *PUBLIC HEALTH; *RESEARCH REPORTS; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 252P. PRICE: $15.00

ABSTRACT: INCLUDED ARE STUDIES PRESENTED AT AN OECD SEMINAR. COMPUTES THE VARIOUS FORMS OF DAMAGE, BOTH ECONOMIC LOSSES AND IMPAIRMENTS OF WELL-BEING, IN ECONOMIC TERMS. THE STUDIES ARE BASED LARGELY ON RESEARCH FOLLOWING THE AMOCO CADIZ DISASTER. THEY SHOW, IN PARTICULAR, THE DIFFICULTIES ENCOUNTERED BY OIL SPILL VICTIMS IN ESTABLISHING HOW MUCH COMPENSATION THEY SHOULD CLAIM.

AVAILABILITY: OECD PULBICATIONS AND INFORMATION CENTER, 1750 PENNSYLVANIA AVE., N.W., SUITE 1207, WASHINGTON, DC 20006

IRIS ACCESSION NUMBER: EW011119

PUBLICATION DATE: 81

TITLE: COMPENSATION FOR POLLUTION DAMAGE.

DESCRIPTOR: *AIR POLLUTION; *COMPENSATION; *ECONOMICS; *POLLUTION DAMAGE; *NUCLEAR RADIATION; *OIL SPILLS; *WATER POLLUTION

DESCRIPTIVE NOTE: 208P. PRICE: $13.50

ABSTRACT: COMPARATIVE ANALYSIS OF THE VARIOUS SOLUTIONS TO THE PROBLEM OF INSURING BETTER COMPENSATION FOR NUCLEAR, OIL, WATER, AND AIR POLLUTION VICTIMS.

AVAILABILITY: OECD PUBLICATIONS AND INFORMATION CENTER, 1750 PENNSYLVANIA AVE., N.W., SUITE 1207, WASHINGTON, DC 20006.

IRIS ACCESSION NUMBER: EW011120

PUBLICATION DATE: 82

TITLE: EUTROPHICATION OF WATERS: MONITORING, ASSESSMENT, AND CONTROL.

DESCRIPTOR: *ASSESSMENT; *ECOLOGY; *EUTROPHICATION; *MONITORING; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 154P. PRICE: $11.50

ABSTRACT: DESCRIBES THE COMPLEXITIES OF EUTROPHICATION AND THE FACTORS IN ITS DEVELOPMENT, AND POINTS TO THE MOST EFFECTIVE MEANS OF CONTROL.

AVAILABILITY: OECD PUBLICATIONS AND INFORMATION CENTER, 1750 PENNSYLVANIA AVE., N.W., SUITE 1207, WASHINGTON, DC 20006

IRIS ACCESSION NUMBER: EW011121

PUBLICATION DATE: 83

TITLE: CHLORINATED DIOXINS AND DIBENZOFURANS IN THE TOTAL ENVIRONMENT.

PERSONAL AUTHOR: CHOUDHARY, GANGADHAR; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINATED DIOXINS; *CHEMICALS; *DIBENZOFURANS; *ENVIRONMENT; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *POLLUTION; *RESEARCH; *PUBLIC HEALTH; *SAMPLING; *TOXIC SUBSTANCES; *WATER POLLUTION

DESCRIPTIVE NOTE: 512P. PRICE: $42.50; BOOK NO.: 0-250-40604-7

ABSTRACT: THE ENVIRONMENTAL EXPOSURE TO CERTAIN CLASSES OF COMPOUNDS OF DIOXIN AND DIBENZOFURAN, PARTICULARLY, 2, 3, 7, 8-TETRACHLORODIBENZO-P-DIOXIN AND 2, 3, 7, 8-TETRACHLORODIBENZOFURAN IS OF GREAT CONCERN, AS THEY ARE SUPERTOXINS TO HUMANS. WITH THE DISCOVERIES OF THESE CHEMICALS AT LOVE CANAL AND TIMES BEACH, THE SUBJECT HAS COME TO THE FOREFRONT OF NATIONAL ATTENTION. THE INCLUSION OF A COMPREHENSIVE INDEX WITH CROSS-REFERENCES TO CHEMICALS, EXPOSURES, AND GEOGRAPHICAL LOCATIONS WILL BE OF IMMENSE HELP TO RESEARCHERS. THIS SINGLE VOLUME CONTAINS THE UP-TO-DATE AND AUTHORITATIVE INFORMATION ON THIS INCREASINGLY SENSITIVE AND IMPORTANT TOPIC. MAJOR SECTIONS INCLUDE: (1) PERSPECTIVES; (2) SYNTHESIS; (3) ENVIRONMENTAL; (4) ANALYTICAL; AND (5) OCCUPATIONAL EXPOSURE AND EFFECTS.

AVAILABILITY: BUTTERWORTH PUBLISHERS, 80 MONTVALE AVENUE, STONEHAM, MA 02180

IRIS ACCESSION NUMBER: EW011127

PUBLICATION DATE: JUN 84

TITLE: WATER SUPPLY IN THE PEOPLE'S REPUBLIC OF CHINA.

PERSONAL AUTHOR: OKUN, DANIEL A.

DESCRIPTOR: *CHINA; *OPERATIONS (WATER); *TRENDS; *WATER DISTRIBUTION; *WATER TREATMENT; *WATER SUPPLY; *WATER RESOURCES

DESCRIPTIVE NOTE: 52-61P.

ABSTRACT: A PHOTO ESSAY SHEDS LIGHT ON MAINLAND CHINA'S WATER SUPPLY CHALLENGE. PRACTICES AND PROBLEMS ARE DESCRIBED BRIEFLY.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N6

IRIS ACCESSION NUMBER: EW011128

PUBLICATION DATE: JUN 84

TITLE: REGIONAL AUTHORITIES SUPPORT SMALL WATER SYSTEMS IN THE AMERICAS.

PERSONAL AUTHOR: DONALDSON, DAVID

DESCRIPTOR: *LATIN AMERICA; *PROGRAM DESCRIPTIONS; *RURAL AREAS; *WATER SUPPLY; *WATER TREATMENT; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 62-67P.

ABSTRACT: THIRTY YEARS OF WATER DEVELOPMENT IS FINALLY BRINGING COMMUNITY SUPPLIES TO RURAL LATIN AMERICA. THIS ARTICLE DESCRIBES PROGRAMS THAT HAVE BEEN DEVELOPED BY WATER AND SANITATION AUTHORITIES FOR SMALLER VILLAGES AND DISPERSED POPULATIONS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N6

IRIS ACCESSION NUMBER: EW011129

PUBLICATION DATE: JUN 84

TITLE: REAL WORLD DESIGN: APPROPRIATE TECHNOLOGY FOR DEVELOPING NATIONS.

PERSONAL AUTHOR: MONK, ROBERT D. G.; AND OTHERS

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *BANGALADESH; *DESIGN; *DEVELOPING COUNTRIES; *FACILITIES; *OPERATIONS (WATER); *TECHNOLOGY; *WATER TREATMENT; *WATER QUALITY; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 68-74P.

ABSTRACT: WATER TREATMENT ENGINEERING THAT WORKS, AND CONTINUES TO WORK, IN DEVELOPING COUNTRIES DEPENDS ON PRUDENT, DOWN-TO-EARTH THINKING. A LOW-TECHNOLOGY, LABOR-INTENSIVE WATER TREATMENT PLAN FOR AN AREA IN BANGLADESH IS DESCRIBED. SOME SUGGESTIONS ARE GIVEN FOR FACILITIES IN OTHER COUNTRIES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N6

IRIS ACCESSION NUMBER: EW011130

PUBLICATION DATE: JUN 84

TITLE: JORDAN MEETS WATER SUPPLY CHALLENGES.

PERSONAL AUTHOR: PRUITT, L. LYNN; THOEM, ROBERT L.

DESCRIPTOR: *DESIGN; *CONSTRUCTION; *FACILITIES; *JORDAN; *PROJECT DESCRIPTIONS; *RESERVOIRS; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER TREATMENT; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 84-86P.

ABSTRACT: AN ENGINEERING FEAT WAS NEEDED TO SUPPLY WATER TO AMMAN'S POPULATION OF NEARLY ONE MILLION PERSONS. THE PROJECT IS DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N6

IRIS ACCESSION NUMBER: EW011132

PUBLICATION DATE: JUN 84

TITLE: BIOFILM FOULING OF RO MEMBRANES - ITS NATURE AND EFFECT ON TREATMENT OF WATER FOR REUSE.

PERSONAL AUTHOR: RUDGWAY, HARRY F.; AND OTHERS

DESCRIPTOR: *BIOCHEMICAL FILMS; *FILTERS; *OPERATIONS (WASTEWATER); *RESEARCH; *REVERSE OSMOSIS; *RECYCLING; *WATER REUSE; *WASTEWATER TREATMENT; WATER TREATMENT; WATER QUALITY

DESCRIPTIVE NOTE: 94-102P.

ABSTRACT: BIOCHEMICAL FILMS THAT FORM ON REVERSE OSMOSIS FILTERS CAN CLOG MEMBRANES AND IMPEDE WATER FLOW. RESULTS OF TESTS ON A MINIATURE RO SYSTEM ARE DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V76 N6

IRIS ACCESSION NUMBER: EW011133

PUBLICATION DATE: APR 84

TITLE: TRIHALOMETHANES IN POTABLE WATER: FORMATION AND REMOVAL. 1978-JANUARY 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS

DESCRIPTOR: ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *DISINFECTION; *DRINKING WATER; *TRIHALOMETHANES; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 133P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-863182

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING KEY FACTORS AFFECTING TRIHALOMETHANE FORMATION IN DRINKING WATERS. ALTERNATE DISINFECTION PROCEDURES, AS WELL AS METHODS FOR TRIHALOMETHANE REMOVAL FROM DRINKING WATERS, ARE DISCUSSED. (CONTAINS 118 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011134

PUBLICATION DATE: APR 84

TITLE: PAPER INDUSTRY EFFLUENTS: COD/BOD. 1975-MARCH, 1984. (CITATIONS FROM THE PAPER AND BOARD, PRINTING, AND PACKAGING INDUSTRIES RES

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BOD; *COD; *BIBLIOGRAPHIES; *EFFLUENTS; *ANALYTICAL TECHNIQUES; *INDUSTRY; *MONITORING; *PAPER INDUSTRY; *RESEARCH REPORTS; *WATER POLLUTION; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 95P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-863372

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE DETERMINATION, TESTING AND MONITORING OF BIOLOGICAL OXYGEN DEMAND AND CHEMICAL OXYGEN DEMAND. THE REDUCTION AND REMOVAL OF BOD AND COD FROM PULP MILL EFFLUENTS ARE INCLUDED. DEOXYGENATION RATES, MATHEMATICAL MODELING FOR WATER QUALITY, CORRELATION BETWEEN COD AND PULP YIELD LOSS, ARTHUR TECHNOLOGY MODELING AND TESTING DETAILS AND RESULTS ARE DISCUSSED. (CONTAINS 114 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011135

PUBLICATION DATE: MAR 84

TITLE: SURVEY OF ENVIRONMENTAL REGULATIONS APPLYING TO GEOTHERMAL EXPLORATION, DEVELOPMENT, AND USE.

PERSONAL AUTHOR: BEELAND, G. V.

DESCRIPTOR: *AIR POLLUTION; *DEVELOPMENT; *ENVIRONMENTAL REGULATIONS; *ENVIRONMENTAL IMPACTS; *GEOTHERMAL ENERGY; *REGULATIONS; *SOLID WASTES; *WATER POLLUTION

DESCRIPTIVE NOTE: 251P. PRICE CODE: PC A12/MF A01; ORDER NO.: PB84-173665

ABSTRACT: FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS AND REGULATIONS THAT APPLY TO GEOTHERMAL ENERGY DEVELOPMENT ARE SUMMARIZED. MOST ATTENTION IS GIVEN TO THOSE REGULATIONS WHICH DEAL WITH AIR POLLUTION, WATER POLLUTION, SOILD WASTES AND IMPACT ASSESSMENTS. ANALYSES ARE MADE OF THE REGULATIONS WITH RESPECT TO RESOURCE DEFINITION, POLLUTANTS CURRENTLY NOT CONTROLLED, DUPLICITY AND OVERLAP IN PERMIT AND IMPACT ASSESSMENT REQUIREMENTS, THE LACK OF UNIFORMITY OF REGULATIONS BETWEEN STATES, AND THE PROBABLE FUTURE APPROACHES TO THE REGULATORY PROBLEMS. THIS PROJECT UPDATES A SIMILAR DOCUMENT (EPA/600/7-78-014) DATED FEBRUARY 1978.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011137

PUBLICATION DATE: FEB 84

TITLE: NATIONAL WATER QUALITY INVENTORY: 1982 REPORT TO CONGRESS.

PERSONAL AUTHOR: ENVIRONMENTAL PROTECTION AGENCY. OFFICE OF WATER.

DESCRIPTOR: *CLEAN WATER ACT; *CONGRESSIONAL REPORTS; *POLLUTION; *TRENDS; *WATER QUALITY; *WATER POLLUTION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 70P. PRICE CODE: PC A04/MF A01; ORDER NO.: PB84-165315

ABSTRACT: CONTENTS INCLUDE: (1) BACKGROUND OF THE CLEAN WATER ACT; (2) NATIONAL PROGRAM DIRECTIONS FOR THE 1980'S; (3) WATER QUALITY STATUS; (4) POLLUTION SOURCES AND CONTROL PROGRAMS; AND (5) COSTS AND BENEFITS OF MEETING THE CLEAN WATER ACT GOAL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011138

PUBLICATION DATE: 83

TITLE: FIELD GUIDE TO INLAND OIL SPILL CLEAN-UP TECHNIQUES.

PERSONAL AUTHOR: BENYON, L. R.; AND OTHERS

DESCRIPTOR: *FIELD GUIDES; *CLEAN-UP TECHNIQUES; *OIL SPILLS; *OIL; *WASTE DISPOSAL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 104P. PRICE CODE: PC E06/MF E01; ORDER NO.: PB84-174085

ABSTRACT: CONTENTS INCLUDE: (1) CLEAN-UP STRATEGY (OBJECTIVES, INTEGRATED CLEAN-UP OPERATIONS, EMERGENCY MEASURES, COMMUNICATIONS, ACTION TREES); (2) CLEAN-UP METHODS (OIL IN SOIL, OIL ON MOVING WATER, OIL ON STATIC WATER, OIL IN URBAN AREAS, EFFECTS OF ICE AND SNOW); (3) TEMPORARY STORAGE; (4) TRANSPORT/FINAL DISPOSAL/RESTORATION OF SITE; AND (5) EMERGENCY EQUIPMENT LISTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011139

PUBLICATION DATE: APR 84

TITLE: SURFACE TREATMENT AGENTS FOR PROTECTION OF SHORELINES FROM OIL SPILLS.

PERSONAL AUTHOR: FOGET, C. R.; AND OTHERS

DESCRIPTOR: *OIL SPILLS; *RESEARCH; *SURFACE TREATMENT AGENTS; *SHORELINES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 149P. PRICE CODE: PC A07/MF A01; ORDER NO.: PB84-177898

ABSTRACT: A LITERATURE REVIEW AND LABORATORY TESTS WERE CONDUCTED TO PROVIDE A BASIS FOR ANALYZING THE RESULTS OF PREVIOUS TESTS ON SURFACE TREATMENT AGENTS, COMPARE AGENT EFFECTIVENESS, AND RECOMMEND AGENTS FOR PRELIMINARY FIELD TESTS. THE SURFACE TREATMENT AGENTS EVALUATED DURING THE PRELIMINARY TESTS WERE FILM-FORMING AGENTS, DISPERSING AGENTS, AND A SURFACE COLLECTING AGENT. FROM THE RESULTS OF THESE TESTS, TWO FILM-FORMING AGENTS, POLYVINYL ACETATE AND XANTHAN GUM, A SURFACE COLLECTING AGENT, AND A FLOWING FILM OF WATER WERE RECOMMENDED AND TESTED DURING FULL-SCALE FIELD TESTS AT SEWAREN BEACH, NEW JERSEY. THE RESULTS OF THE FULL-SCALE FIELD TESTS SHOWED THAT POLYVINYL ACETATE PROVIDED BOTH BEACH AND MARSH TEST PLOTS WITH THE MOST EFFECTIVE LONG-TERM PROTECTION. THE TOXIC EFFECTS OF THE VARIOUS AGENTS ON THE EASTERN BLUE CRAB AND CORD GRASS (SPARTINA FOLIOSA) WERE ALSO EVALUATED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011140

PUBLICATION DATE: APR 84

TITLE: COMMERCIAL SHELLFISH INDUSTRY: WATER POLLUTION EFFECTS. 1977-MARCH, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS D

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ENVIRONMENTAL IMPACTS; *FOOD INDUSTRY; *INDUSTRY; *MONITORING; *POLLUTION; *PUBLIC HEATH; *SHELLFISH; *SEAFOODS; *WATER POLLUTION

DESCRIPTIVE NOTE: 174P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-863786

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TYPES OF POLLUTANTS AND THE EFFECTS ON THE SHELLFISH INDUSTRY. A WIDE RANGE OF AGENTS, INCLUDING BACTERIA, HEAVY METALS, OIL, AND THERMAL POLLUTANTS ARE CONSIDERED. METHODS FOR MONITORING THESE AGENTS, THEIR EFFECTS ON THE SURVIVAL OF SHELLFISH, AND THEIR EFFECTS ON HUMAN CONSUMERS ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 188 CITATIONS, 18 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011142

PUBLICATION DATE: 82

TITLE: GRAVITY SANITARY SEWER DESIGN AND CONSTRUCTION.

PERSONAL AUTHOR: WATER POLLUTION CONTROL FEDERATION; AMERICAN SOCIETY OF CIVIL ENG

DESCRIPTOR: *DESIGN; *CONSTRUCTION; *HANDBOOKS; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 288P. PRICE: $15.00 MEMBER, $20.00 NON-MEMBER; ORDER NO.: MOP FD-5

ABSTRACT: THE MANUAL PROVIDES BOTH THEORETICAL AND PRACTICAL GUIDANCE IN THE DESIGN AND CONSTRUCTION OF GRAVITY SANITARY SEWERS, AND IS BASED UPON THE EXPERIENCE OF ENGINEERS IN THE FIELD OF SANITARY SEWER STRUCTURAL AND HYDRAULIC DESIGN. THE INITIAL CHAPTER DEALS WITH THE ORGANIZATION AND ADMINISTRATION OF SANITARY SEWER PROJECTS. SUBSEQUENT CHAPTERS PROVIDE GUIDELINES NECESSARY TO ESTABLISH THE DESIGN CRITERIA, COMPLETE THE DESIGN, AND AWARD THE CONSTRUCTION CONTRACT. FACTORS THAT THESE CHAPTERS ADDRESS INCLUDE: QUANTITY OF WASTEWATER, INFILTRATION/INFLOW, SULFIDE GENERATION AND CORROSION PROTECTION, SEWER HYDRAULICS, DESIGN OF SANITARY SEWER SYSTEMS, APPURTENANCES AND SPECIAL STRUCTURES, AND MATERIALS FOR SEWER CONSTRUCTION. FACTORS WHICH AFFECT CONDITIONS OF SERVICE ARE ALSO PRESENTED AND DISCUSSED. THE MANUAL CONCLUDES WITH AN EXAMINATION OF CONSTRUCTION CONTRACT DOCUMENTS AND CONSTRUCTION METHODS.

AVAILABILITY: WPCF PUBLICATIONS ORDER DEPT., 2626 PENNSYLVANIA AVE. N.W., WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW011143

PUBLICATION DATE: 84

TITLE: WHERE DOES WATERBORNE GIARDIASIS OCCUR, AND WHY?

PERSONAL AUTHOR: LIPPY, E. C.; LOGSDON, G. S.

DESCRIPTOR: *COAGULATION; *DISINFECTION; *FILTRATION; *GIARDIASIS; *GIARDIA; *OPERATIONS (WATER); *PUBLIC HEALTH; *WATER TREATMENT

DESCRIPTIVE NOTE: 11P. PRICE CODE: PC A02/MF A01; ORDER NO.: PB84-177344

ABSTRACT: OVER 60 OUTBREAKS OF WATERBORNE GIARDIASIS OCCURRED IN THE UNITED STATES BETWEEN 1965 AND 1982, MAINLY IN THE NORTHEAST, THE ROCKY MOUNTAIN STATES, AND THE PACIFIC STATES. OUTBREAKS MOST OFTEN OCCURRED AS A RESULT OF INADEQUATE OR INTERRUPTED TREATMENT. DISINFECTION PROBLEMS AND FAILURE TO PROVIDE FILTRATION WERE NOTED IN A MAJORITY OF TREATMENT-RELATED OUTBREAKS. INADEQUATE COAGULATION AND POOR FILTRATION PRACTICES WERE IDENTIFIED AS PROBLEMS WHERE TREATMENT WAS PROVIDED. RECENT RESEARCH HAS SHOWN THE SORT OF TREATMENT PRACTICES THAT CAN PERMIT GIARDIA CYSTS TO PASS THROUGH TREATMENT PLANTS AS WELL AS WHAT IS NEEDED TO PROVIDE EFFECTIVE BARRIERS TO THE CYSTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161.

IRIS ACCESSION NUMBER: EW011144

PUBLICATION DATE: 84

TITLE: RESEARCH FOR THE TREATMENT OF ORGANICS IN DRINKING WATER.

PERSONAL AUTHOR: LOVE, O. T.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *OPERATIONS (WATER); *ORGANIC COMPOUNDS; *PROGRAM DESCRIPTIONS; *RESEARCH; *WATER TREATMENT

DESCRIPTIVE NOTE: 10P. PRICE CODE: PC A02/MF A01; ORDER NO.: PB84-177757

ABSTRACT: THE U. S. ENVIRONMENTAL PROTECTION AGENCY-DRINKING WATER RESEARCH DIVISION USES A THREE TIERED APPROACH TO RESEARCH. THE FIRST STEP IS BENCH-SCALE, WHERE THE CHEMICAL BEHAVIOR OF THE ORGANIC CONTAMINANT CAN BE INVESTIGATED IN A CLOSELY CONTROLLED ENVIRONMENT. THE NEXT LEVEL, PILOT-SCALE, IS AN ATTEMPT TO MATCH THE CONTAMINANT WITH AN EXISTING WATER TREATMENT PROCESS. THE FINAL STEP IS TO TAKE THE MOST PROMISING TREATMENT IDEAS TO THE FIELD FOR FULL-SCALE EVALUATION (TO EXAMINE OPERATIONAL PROBLEMS AND COSTS) AT ONE OR MORE SITES WITH WATERS HAVING THE ORGANIC CONTAMINANT(S) OF CONCERN. THIS SEQUENTIAL APPROACH TO TREATMENT RESEARCH IS BEING USED ON EPA-DWRD'S THREE HIGHEST PRIORITY ORGANIC ISSUES: VOLATILE ORGANIC COMPOUNDS, SYNTHETIC ORGANIC COMPOUNDS, AND DISINFECTION BY-PRODUCTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011145

PUBLICATION DATE: 84

TITLE: DISINFECTION AND THE CONTROL OF WATERBORNE GIARDIASIS.

PERSONAL AUTHOR: HOFF, J. C.; AND OTHERS

DESCRIPTOR: *DISINFECTION; *GIARDIASIS; *GIARDIA; *RESEARCH; *RECOMMENDATIONS; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 10P. PRICE CODE: PC A02/MF A01; ORDER NO: PB84-177864

ABSTRACT: IN THE EARLY 1970'S, WHEN GIARDIASIS BEGAN TO BE RECOGNIZED AS AN IMPORTANT WATERBORNE DISEASE, THE UNDERSTANDING OF THE EFFECTS OF DISINFECTANTS ON THE CYSTS OF THE ETIOLOGIC AGENT, GIARDIA LAMBLIA, WAS EXTREMELY LIMITED. THE RESULTS OF MORE RECENT STUDIES, USING IMPROVED METHODS FOR DETERMINING CYST VIABILITY INDICATE THAT GIARDIA CYSTS ARE MORE RESISTANT TO INACTIVATION BY DRINKING WATER DISINFECTANTS THAN OTHER WATERBORNE BACTERIAL AND VIRAL PATHOGENS BUT ARE NOT AS HIGHLY RESISTANT AS INDICATED BY EARLIER STUDIES. THE DATA NOW AVAILABLE INDICATE THAT RIGOROUSLY CONTROLLED DISINFECTION PRACTICES ARE ESSENTIAL IN PREVENTING WATERBORNE TRANSMISSION OF GIARDIASIS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011146

PUBLICATION DATE: FEB 84

TITLE: ECONOMIC IMPACT ANALYSIS OF EFFLUENT LIMITATIONS AND STANDARDS FOR THE NONFERROUS METALS MANUFACTURING INDUSTRY. PHASE 1.

PERSONAL AUTHOR: POLICY PLANNING AND EVALUATION, INC., MCLEAN, VA.

DESCRIPTOR: *ECONOMIC IMPACTS; *ECONOMICS; *USEPA; *EFFLUENTS; *GUIDELINES; *INDUSTRY; *METALS; *NONFERROUS METALS; *POLLUTION CONTROL; *STANDARDS

DESCRIPTIVE NOTE: 249P. PRICE CODE: PC A11/MF A01; ORDER NO.: PB84-177872

ABSTRACT: THE U. S. ENVIRONMENTAL PROTECTION AGENCY ISSUED EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS FOR THE NONFERROUS METALS MANUFACTURING INDUSTRY IN FEBRUARY 1984. THIS REPORT ESTIMATES THE ECONOMIC IMPACT OF POLLUTION CONTROL COSTS IN TERMS OF PRICE CHANGES, EFFECTS ON PROFITABILITY, CONTINUED VIABILITY OF PLANTS, AND OTHER EFFECTS. A PLANT-SPECIFIC APPROACH IS USED TO ASSESS THESE IMPACTS FOR TEN METAL SUBCATEGORIES, WHICH COMPRISE ONE PHASE OF THIS INDUSTRY. FOR MOST OF THESE SUBCATEGORIES, THE IMPACTS ARE EXPECTED TO BE MINIMAL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011147

PUBLICATION DATE: APR 84

TITLE: SOIL SALINITY: IRRIGATION PRACTICES AND EFFECTS ON CROPS AND GROUNDWATER. 1977-MARCH, 1984 (CITATIONS FROM THE SELECTED WATER RES

DESCRIPTOR: *AGRICULTURE; *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *GROUNDWATER; *IRRIGATION; *ENVIRONMENTAL IMPACTS; *SALINITY; *WATER QUALITY

DESCRIPTIVE NOTE: 121P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-863901

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE EFFECTS ON CROPS AND GROUNDWATER FROM IRRIGATION WATERS HAVING HIGH SALINITY. THE SALT TOLERANCE OF CROPS, INCLUDING BEANS, WHEAT AND CITRUS FRUITS, ARE EXAMINED. SOIL SALINITY, GROUNDWATER SALINITY, AND RIVER AND STREAM SALINITY ARE DISCUSSED. THE SOURCES OF THE BRACKISH WATER ARE ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 118 CITATIONS, 14 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011148

PUBLICATION DATE: APR 84

TITLE: OXIDATION PONDS: ENGINEERING CONCEPTS. 1977-MARCH, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *DESIGN; *ENGINEERING; *FACILITIES; *LAGOONS; *OXIDATION PONDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 99P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-863943

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING DESIGN AND ENGINEERING PARAMETERS OF OXIDATION PONDS. A WIDE VARIETY OF WASTEWATER SYSTEMS ARE DISCUSSED AND CONSIDERATION IS GIVEN TO UPGRADING WATER QUALITY FROM THESE LAGOONS. (CONTAINS 88 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011149

PUBLICATION DATE: APR 84

TITLE: PULP AND PAPER MILL BLEACHING EFFLUENTS: TOXICITY AND CONTROL TECHNIQUES. 1972 - MARCH 1984 (CITATIONS FROM THE INSTITUTE OF PAPE

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; *EFFLUENTS; *ENVIRONMENTAL IMPACTS; *INDUSTRY; *PAPER INDUSTRY; *POLLUTION CONTROL; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 197P. PRICE CODE: PC N01/MF N01; PB84-864057

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE TOXIC EFFECTS THAT PULP AND PAPER MILL BLEACHING PROCESSES AND MATERIALS HAVE ON THE SURROUNDING ENVIORNMENT. BLEACHING TECHNIQUES; TOXICITY AND MUTAGENICITY MONITORING AND TESTING; EFFLUENT TREATMENT; AND ENVIORNMENTAL IMPACTS ON FISHES, ANIMALS, WATER ANIMALS AND AQUATIC PLANTS ARE DISCUSSED. IDENTIFICATION AND CHARACTERIZATION OF TOXICANTS ARE INCLUDED. (CONTAINS 203 CITATIONS FULLY INDEXED AND INCLUDING A TITLE LIST.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011150

PUBLICATION DATE: JUN 84

TITLE: STRATEGIC PLANNING METHODS MATURE AT NYC'S WATER BUREAU.

PERSONAL AUTHOR: HERSCH, PAUL

DESCRIPTOR: *BUDGET PLANNING; *GOALS; *MANAGEMENT; *OPERATIONS (WATER); *NEW YORK; *PLANNING; *WATER UTILITIES; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 14P.

ABSTRACT: DESCRIBED ARE THE STRATEGIC PLANNING METHODS USED AT THE NEW YORK CITY WATER BUREAU. THE PLANS PROVIDE A CLEARER UNDERSTANDING OF NEEDS AND FUTURE OPTIONS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N6

IRIS ACCESSION NUMBER: EW011151

PUBLICATION DATE: JUN 84

TITLE: METRICATION OF THE HAZEN-WILLIAMS METHOD.

DESCRIPTOR: CALCULATIONS; CALCULATORS; *CALCULATOR PROGRAMS; *HAZEN-WILLIAMS EQUATION; *FLUID FLOW; *FRICTION HEAD LOSS; *PIPES

DESCRIPTIVE NOTE: 21P.

ABSTRACT: A PROGRAM FOR A TI-55 PROGRAMMABLE CALCULATOR WILL SOLVE THE HAZEN-WILLIAMS EQUATION WHEN DATA ARE PROVIDED IN METRIC FORM.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N6

IRIS ACCESSION NUMBER: EW011152

PUBLICATION DATE: JUN 84

TITLE: RBCS REACH MATURITY.

DESCRIPTOR: *BIOLOGICAL CONTACTORS; *COSTS; *EQUIPMENT; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *ROTATING BIOLOGICAL CONTACTORS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 28-31P.

ABSTRACT: FIRST INTRODUCED AS A FULL-SCALE SYSTEM IN THE EARLY 1970'S THE ROTATING BIOLOGICAL CONTACTOR (RBC) HAS TAKEN ITS PLACE WITH OTHER BROADLY ACCEPTED WASTEWATER TREATMENT PROCESSES. EXPERIENCE WITH RBC'S AND FUTURE TECHNOLOGICAL DEVELOPMENTS ARE CONSIDERED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N6

IRIS ACCESSION NUMBER: EW011153

PUBLICATION DATE: JUN 84

TITLE: CHECKLIST EASES DESIGN/BUILD TASK.

PERSONAL AUTHOR: GROSS, CHARLES; AND OTHERS

DESCRIPTOR: *DESIGN; *ENGINEERING; *CONSTRUCTION; *EQUIPMENT; *FACILITIES; *PLANNING; *ROTATING BIOLOGICAL CONTACTORS; *SECONDARY TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 32-33P.

ABSTRACT: A 27-POINT CHECKLIST HAS BEEN DEVELOPED TO AID THE PLANNING, DESIGN AND CONSTRUCTION OF WASTEWATER TREATMENT FACILITIES THAT INCORPORATE THE ROTATING BIOLOGICAL CONTACTOR SYSTEM AS THE PRINCIPAL SECONDARY TREATMENT PROCESS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N6

IRIS ACCESSION NUMBER: EW011154

PUBLICATION DATE: JUN 84

TITLE: SCREENING SYSTEM MAKES DOWNSTREAM LIFE SIMPLER.

PERSONAL AUTHOR: LENHART, CHARLES F.; MCGARRY, JAMES A.

DESCRIPTOR: *DESIGN; *EQUIPMENT; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PRIMARY TREATMENT; *ROTARY DRUM SCREENS; *SCREENING; *SCREENS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 38-41P.

ABSTRACT: DESCRIBED IS A WASTEWATER TREATMENT FACILITY MODIFICATION THAT SOLVED SOME SCREENING PROBLEMS THAT WERE AFFECTING THE PRIMARY TREATMENT SECTION. FOUR INTERNALLY FED ROTARY DRUM SCREENS ARE AT THE CORE OF THE SCREENING SYSTEM.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N6

IRIS ACCESSION NUMBER: EW011155

PUBLICATION DATE: JUN 84

TITLE: BENEFITTING FROM COMPUTER TECHNOLOGY.

PERSONAL AUTHOR: BUSCH, PAUL L.; PILLSBURY, ROBERT L.

DESCRIPTOR: *DESIGN; *COMPUTERS; *COMPUTER APPLICATIONS; *MONITORING; *PROCESS EVALUATION; *PROCESS CONTROLS; *OPERATIONS (WASTEWATER); *REPORTING; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 42-43P.

ABSTRACT: COMPUTER TECHNOLOGY IS AVAILABLE FOR USE IN

WASTEWATER TREATMENT. SEVERAL USES OF COMPUTERS IN WASTEWATER TREATMENT ARE DESCRIBED. SOME PROBLEMS ASSOCIATED WITH USE ARE NOTED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V131 N6

IRIS ACCESSION NUMBER: EW011161

PUBLICATION DATE: 74

TITLE: WATER RESOURCES PROBLEMS RELATED TO MINING.

PERSONAL AUTHOR: HADLEY, RICHARD F.; SNOW, DAVID T., EDS.

DESCRIPTOR: *ENVIRONMENTAL IMPACTS; *INDUSTRY; *MANAGEMENT; *MINING; POLLUTION CONTROL; *SYMPOSIA; *WASTE DISPOSAL; *WATER RESOURCES; *WATER QUALITY; *WATER POLLUTION CONTROL; *WATER SUPPLY

DESCRIPTIVE NOTE: 236P. PRICE: $16.00

ABSTRACT: THE PURPOSE OF THE SYMPOSIUM WAS TO EXAMINE MANY OF THE QUESTIONS THAT DEAL WITH WATER RESOURCES PROBLEMS RELATED TO MINING. THE MINING INDUSTRY IS FACED WITH PROBLEMS OF CONTROLLING STREAM AND AQUIFER POLLUTION, WASTE DISPOSAL, TRANSPORT OF SOLIDS BY WATER, LEACHING OF ORES AND TAILINGS, AND WATER SUPPLIES. DATA AND INTERPRETATIONS FROM STUDIES OF MINE DRAINAGE, MINE-WASTE MANAGEMENT, MINE HYDROLOGY, ACQUISITION OF WATER SUPPLIES, AND ENVIRONMENTAL IMPACTS OF MINING OPERATIONS WERE CONSIDERED. WHILE MANY OF THE PROBLEMS ARE FAR FROM SATISFACTORY SOLUTION, THE SYMPOSIUM REVEALED THAT EFFORTS BY THE SCIENTIFIC COMMUNITY AND THE MINING INDUSTRY ARE MAKING GOOD PROGRESS TOWARD SOLVING MANY OF THE PROBLEMS.

AVAILABILITY: AMERICAN WATER RESOURCES ASSOCIATION, 5410 GROSVENOR LANE, SUITE 220, BETHESDA, MD 20814

IRIS ACCESSION NUMBER: EW011162

PUBLICATION DATE: NOV 78

TITLE: WETLAND FUNCTIONS AND VALUES: THE STATE OF OUR UNDERSTANDING. PROCEEDINGS OF THE NATIONAL SYMPOSIUM ON WETLANDS (LAKE BUENA VISTA, FL, NOVEMBER 7-10, 1978).

PERSONAL AUTHOR: GREESON, PHILLIP E., ED.; AND OTHERS

DESCRIPTOR: *ECOLOGY; *FLOOD CONTROL; *ISSUES; *LAND USE; *NATURAL RESOURCES; *SYMPOSIA; *WETLANDS; *WATER SUPPLY; *WATER QUALITY; *WILDLIFE HABITAT

DESCRIPTIVE NOTE: 674P. PRICE: $49.00

ABSTRACT: THE PURPOSE OF THE SYMPOSIUM WAS TO PROVIDE A FORUM FOR SCIENTISTS TO REVIEW THE STATE OF KNOWLEDGE ON VALUES OF WETLANDS IN THE UNITED STATES, BOTH INLAND AND COASTAL, AND TO CONSIDER RESEARCH PRIORITIES. THE SYMPOSIUM INTENSELY EXAMINED THE ECOLOGICAL VALUES OF WETLANDS, PARTICULARLY SUCH FUNCTIONS AS NUTRIENT CYCLING, DECOMPOSITION, HYDROLOGY, AND PRODUCTIVITY. THESE FUNCTIONS WERE TRANSLATED INTO SOCIAL, HEALTH, WELFARE, AND SAFETY ISSUES, LIKE FLOOD CONTROL, WATER SUPPLY AND QUALITY, WILDLIFE HABITAT, AND BASIC LIFE SUPPORT.

AVAILABILITY: AMERICAN WATER RESOURCES ASSOCIATION, 5410 GROSVENOR LANE, SUITE 220, BETHESDA, MD 20814

IRIS ACCESSION NUMBER: EW011164

PUBLICATION DATE: 84

TITLE: WATER ANALYSIS, VOLUME II: INORGANIC SPECIES, PART 2.

PERSONAL AUTHOR: MINEAR, R.; KEITH, L.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMISTRY; *INORGANIC CHEMICALS; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *POSTSECONDARY EDUCATION; *WATER ANALYSIS; *WATER QUALITY

DESCRIPTIVE NOTE: 200P. PRICE: APPROX. $42.00

ABSTRACT: VOLUME 2 OF THIS 3 VOLUME TREATISE FOCUSES ON INORGANIC CONSTITUENTS IN WATER. THE INDIVIDUAL TOPICS PRESENTED HERE ARE COVERED IN DETAIL. EMPHASIS IS ON THE APPLICATION AND PRACTICE OF THE TECHNIQUES DISCUSSED SUCH AS MOLECULAR LUMINESCENCE METHODS, ELECTROCHEMICAL METHODS USING AMPEROMETRIC ANALYSIS, ION-SELECTIVE ELECTRODES, AND MOLECULAR AND ATOMIC ABSORPTION SPECTROMETRY.

AVAILABILITY: ACADEMIC PRESS, INC., 111 FIFTH AVE., NEW YORK, NY 10003

IRIS ACCESSION NUMBER: EW011165

PUBLICATION DATE: 84

TITLE: METHODS FOR THE ANALYSIS OF TRACE ORGANIC POLLUTANTS IN WATER AND WASTEWATER.

PERSONAL AUTHOR: ENVIRONMENTAL PROTECTION AGENCY

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *LABORATORY PROCEDURES; *ORGANIC COMPOUNDS; *REGULATIONS; *POLLUTANTS; *STANDARDS; *WATER QUALITY; *WASTEWATER; *WATER ANALYSIS; *WASTEWATER ANALYSIS

DESCRIPTIVE NOTE: PRICE: $25.00; MEMBER PRICE: $20.00

ABSTRACT: METHODS FOR THE ANALYSIS OF TRACE ORGANIC POLLUTANTS IN WATER AND WASTEWATER INCLUDES IN ONE DOCUMENT ALL FIVE OF EPA'S NEW TABLES LISTING APPROVED METHODS FOR ALL PARAMETERS AND POLLUTANTS REGULATED IN EPA'S NPDES REGULATIONS, ALL OF THE RECENT REVISIONS AND ADDITIONS TO EPA'S REGULATIONS AND THE COMPLETE TEXT OF ALL SIXTEEN NEW EPA METHODS: TWELVE GAS CHROMATOGRAPHIC METHODS, THREE GAS CHROMATOGRAPHY-MASS SPECTROMETRY METHODS FOR THE ANALYSIS OF TRACE ORGANIC POLLUTANTS, INCLUDING PESTICIDES, AND ONE INDUCTIVELY COUPLED PLASMA (ICP) METHOD FOR THE SIMULTANEOUS

ANALYSIS OF 25 ELEMENTS, INCLUDING CADMIUM AND OTHER METALS.

AVAILABILITY: PUBLICATIONS ORDER DEPT., WATER POLLUTION CONTROL FEDERATION, 2626 PENNSYLVANIA AVE., NW, WASHINGTON, DC 20037

IRIS ACCESSION NUMBER: EW011166

PUBLICATION DATE: 80

TITLE: COLORIMETRIC CHEMICAL ANALYTICAL METHODS, 9TH EDITION.

PERSONAL AUTHOR: THOMAS, L. C.; CHAMBERLIN, G. J.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMISTRY; *COLORIMETRIC ANALYSIS; *INORGANIC CHEMICALS; *INSTRUCTIONAL MATERIALS; *ORGANIC CHEMICALS; *POSTSECONDARY EDUCATION

DESCRIPTIVE NOTE: 626P. PRICE: $121.95

ABSTRACT: A COMPREHENSIVE GUIDE TO COLORIMETRIC ANALYSIS. DETAILS THE THREE-STEP PROCEDURE OF ISOLATING THE MATERIAL TO BE TESTED, PRODUCING THE COLOR BY THE ACTION OF A CHEMICAL REAGENT, AND MEASURING THE COLOR PRODUCED. TEST INSTRUCTIONS ARE GIVEN, SHOWING MODIFICATIONS FOR A WIDE VARIETY OF APPLICATIONS.

AVAILABILITY: ANALYST'S BOOKSTORE, P.O. BOX 2097, CORVALLIS, OR 97339

IRIS ACCESSION NUMBER: EW011168

PUBLICATION DATE: 81

TITLE: QUALITY CONTROL IN ANALYTICAL CHEMISTRY (CHEMICAL ANALYSIS: A SERIES OF MONOGRAPHS ON ANALYTICAL CHEMISTRY AND ITS APPLICATIONS, VOL. 60).

PERSONAL AUTHOR: KATEMAN, G.; PIJPERS, F. W.

DESCRIPTOR: *ANALYTICAL CHEMISTRY; *ANALYTICAL TECHNIQUES; *CHEMISTRY; *CHEMICAL ANALYSIS; *INSTRUCTIONAL MATERIALS; *LABORATORY PROCEDURES; *POSTSECONDARY EDUCATION; *QUALITY CONTROL

DESCRIPTIVE NOTE: 276P. PRICE: $32.00

ABSTRACT: CONTENTS INCLUDE: (1) INTRODUCTION: QUALITY IN CHEMICAL ANALYSIS; QUALITY CONTROL; (2) SAMPLING: DEFINITIONS; PURPOSE OF SAMPLING; TYPES OF OBJECTS AND SAMPLES; SAMPLE QUALITY; SAMPLING PARAMETERS; HANDLING OF SAMPLES; QUALITY CONTROL OF SAMPLING; (3) ANALYSIS: CHARACTERISTICS OF ANALYSIS; QUALITY OF ANALYTICAL PROCEDURE; SELECTION OF AN ANALYTICAL PROCEDURE; QUALITY CONTROL; SEQUENTIAL ANALYSIS; (4) DATA PROCESSING: DATA PRODUCTION; INFORMATION THEORY; DATA REDUCTION; DATA RECONSTRUCTION AND CURVE FITTING; DATA HANDLING; ANALYSIS OF VARIANCE; PATTERN RECOGNITION; OPTIMIZATION; COMPUTATIONAL ASPECTS; AND (5) ORGANIZATION: PLANNING; ORGANIZATION OF MANAGEMENT.

AVAILABILITY: ANALYST'S BOOKSTORE, P.O. BOX 2097, CORVALLIS, OR 97339

IRIS ACCESSION NUMBER: EW011170

PUBLICATION DATE: 80

TITLE: MICROBIOLOGICAL ASPECTS OF POLLUTION CONTROL, SECOND REVISED EDITION.

PERSONAL AUTHOR: DART, R. K.; STRETTON, R. J.

DESCRIPTOR: *AIR POLLUTION; *DISINFECTION; EUTROPHICATION; *MICROBIOLOGY; *PATHOGENS; *POLLUTION CONTROL; SEWAGE; *WASTEWATER TREATMENT; *WATER TREATMENT; WATER QUALITY; *WATER POLLUTION

DESCRIPTIVE NOTE: 266P. PRICE: $57.50

ABSTRACT: EACH CHAPTER INCLUDES A SELF-CONTAINED REVIEW, UPDATED AND SUBSTANTIALLY ENLARGED WITH REGARD TO THE FIRST EDITION. A LARGE NUMBER OF RECENT REFERENCES TO PRIMARY SOURCES OF INFORMATION ARE INCLUDED. THE MAIN EMPHASIS OF THE WORK IS ON THE APPLIED MICROBIOLOGY OF WATER, ITS POLLUTION BY SEWAGE AND ITS TREATMENT TO RENDER IT POTABLE. THE HEALTH HAZARDS OF POLLUTED WATER ARE DESCRIBED AND MEASURES TAKEN TO MINIMIZE THESE RISKS ARE CONSIDERED. DESCRIPTIONS ARE GIVEN OF THE PROBLEMS OF EUTROPHICATION, THERMAL POLLUTION, OIL POLLUTION AND MINE DRAINAGE. THE BIOCHEMISTRY OF DEGRADATION IS DEALT WITH IN THE FINAL CHAPTER.

AVAILABILITY: ANALYST'S BOOKSTORE, P.O. BOX 2097, CORVALLIS, OR 97339

IRIS ACCESSION NUMBER: EW011171

PUBLICATION DATE: 80

TITLE: ANALYSIS WITH ION-SELECTIVE ELECTRODES, SECOND EDITION.

PERSONAL AUTHOR: BAILEY, P.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICAL ANALYSIS; *CHEMICALS; *ION-SELECTIVE ELECTRODES; *INSTRUCTIONAL MATERIALS; *LABORATORY EQUIPMENT; *LABORATORY PROCEDURES; *POSTSECONDARY EDUCATION

DESCRIPTIVE NOTE: 264P. PRICE: $32.95

ABSTRACT: SINCE THE FIRST EDITION OF THIS BOOK, THE USE OF ION-SELECTIVE AND GAS SENSING PROBES, PARTICULARLY IN INDUSTRY, HAS GROWN STEADILY AND A GREATER UNDERSTANDING OF THE MECHANISM BY WHICH SENSORS OPERATE HAS BEEN GAINED. MUCH OF THIS PROGRESS HAS BEEN INCORPORATED INTO THE SECOND EDITION WHICH RETAINS THE DUAL AIM: TO PROVIDE THE ANALYST WITH THE INFORMATION NECESSARY TO ASSESS THE SUITABILITY OF

ELECTRODES OR PROBES FOR PARTICULAR ANALYSES AND TO ASSIST DEVELOPMENT OF ANALYTICAL METHODS OF THE REQUIRED ACCURACY. CONTENTS INCLUDE (1) INTRODUCTION; (2) CELLS AND REFERENCE ELECTRODES; (3) ELECTRODE PERFORMANCE; (4) CLASS ELECTRODES; (5) ELECTRODES BASED ON INORGANIC SALTS; (6) ELECTRODES BASED ON ION EXCHANGES AND NEUTRAL CARRIERS; (7) GAS-SENSING PROBES; (8) MISCELLANEOUS SENSORS; (9) PRACTICAL PROCEDURES; AND (10) MANUFACTURE OF ELECTRODES.

AVAILABILITY: ANALYST'S BOOKSTORE, P.O. BOX 2097, CORVALLIS, OR 97339

IRIS ACCESSION NUMBER: EW011179

PUBLICATION DATE: 84

TITLE: EPA'S (ENVIRONMENTAL PROTECTION AGENCY'S) CENTER FOR WATER QUALITY MODELING.

PERSONAL AUTHOR: BARNWELL, T. O., JR.

DESCRIPTOR: *CENTER FOR WATER QUALITY MODELING; *EPA; *COMPUTER APPLICATIONS; *MODELING; *MODELS; *PROGRAM DESCRIPTIONS; *SIMULATION; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 8P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB84-166990

ABSTRACT: THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) ESTABLISHED THE CENTER FOR WATER QUALITY MODELING TO PROVIDE A FOCAL POINT FOR WATER QUALITY MODELING ACTIVITIES. THE CENTER SUPPORTS A RANGE OF TECHNIQUES AND COMPUTER PROGRAMS FOR WATER QUALITY ANALYSIS RANGING FROM SIMPLE DESK-TOP TECHNIQUES APPROPRIATE FOR PRELIMINARY ANALYSIS TO SOPHISTICATED CONTINUOUS SIMULATION MODELS FOR DETAILED PLANNING. THIS PAPER DESCRIBES THE MODELS SUPPORTED BY THE CENTER AND GIVES AN OVERVIEW OF THE CENTER'S ACTIVITIES, WHICH INCLUDE DISTRIBUTION AND MAINTENANCE OF COMPUTER PROGRAMS, TRAINING, AND SPONSORSHIP OF A USERS GROUP.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011180

PUBLICATION DATE: FEB 84

TITLE: FEDERAL AND STATE EFFORTS TO PROTECT GROUND WATER.

PERSONAL AUTHOR: GENERAL ACCOUNTING OFFICE, WASHINGTON, DC.

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *FEDERAL ROLE; *POLICY; *STATE ROLE; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 93P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB84-174317

ABSTRACT: THIS REPORT DISCUSSES FEDERAL AND STATE EFFORTS TO PROTECT THE NATION'S GROUNDWATER SUPPLIES. THE REPORT PROVIDES INFORMATION ON THE NATURE AND SCOPE OF GROUNDWATER CONTAMINATION, ADEQUACY OF FEDERAL AND STATE AUTHORITY AND RESOURCES TO DEAL WITH GROUNDWATER CONTAMINATION, AND THE FEDERAL GOVERNMENT'S ROLE IN FORMULATING, ADMINISTERING, AND SUPPORTING A NATIONAL GROUNDWATER PROTECTION POLICY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011181

PUBLICATION DATE: FEB 83

TITLE: MANAGEMENT OF DECENTRALIZED ON-SITE SYSTEMS FOR TREATMENT OF DOMESTIC WASTES.

PERSONAL AUTHOR: WARD, R. C.; ENGLEHARDT, J. D.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *DOMESTIC WASTES; *MANAGEMENT; *MAINTENANCE; *ONSITE TREATMENT; *OPERATIONS (WASTEWATER); *RESEARCH; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 159P. PRICE CODE: PC A08/MF A01. ORDER NO.: PB84-176692

ABSTRACT: STRATEGIES FOR MANAGING ON-SITE WASTEWATER TECHNOLOGY ARE EXAMINED AND WEAKNESSES IN OPERATION AND MAINTENANCE (O AND M) ARE POINTED OUT. IT IS CONCLUDED THAT MUCH OF THE REASON FOR NOT PROPERLY ADDRESSING ON-SITE O AND M IS DUE TO THE LACK OF DEFINITION AS TO WHAT IS INVOLVED IN PROVIDING PROFESSIONALLY RENDERED O AND M TECHNOLOGY FOR A TOTAL COMMUNITY. IN ADDITION, INADEQUATE UNDERSTANDING OF THE PROPER O AND M OF ON-SITE TECHNOLOGY BY OWNERS, DESIGNERS, MANUFACTURERS, OPERATORS, MANAGERS, AND REGULATORS HAS BEEN A MAJOR DETERRENT TO EFFECTIVE UTILIZATION OF THE TECHNOLOGY. RECOMMENDATIONS FOR FURTHER RESEARCH INCLUDE THE USE OF COMPUTERIZED OPTIMIZATION TECHNIQUES TO AID IN WASTEWATER TECHNOLOGY SELECTION AND THE INCORPORATION OF A MORE TECHNICALLY SOUND APPROACH TO PROVIDING PROFESSIONAL O AND M. A COMPUTER PROGRAM IS PRESENTED FOR ON-SITE WASTEWATER TREATMENT O AND M REQUIREMENTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011182

PUBLICATION DATE: APR 84

TITLE: CHARACTERIZATION OF OPERATING AND MAINTENANCE PRACTICES FOR WASTEWATER TREATMENT SYSTEMS IN THE IRON AND STEEL INDUSTRY.

PERSONAL AUTHOR: PRICE, R. T.; AND OTHERS

DESCRIPTOR: *IRON INDUSTRY; *INDUSTRY; *INDUSTRIAL WASTES; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *TRAINING; *TROUBLESHOOTING; *STEEL INDUSTRY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 379P. PRICE CODE: PC A17/MF A01. ORDER

ABSTRACT: THE REPORT DOCUMENTS EFFECTIVE OPERATING AND MAINTENANCE (O/M) PRACTICES FOR WASTEWATER TREATMENT SYSTEMS IN THE IRON AND STEEL INDUSTRY, AND DESCRIBES HOW THEIR APPLICATION MIGHT AFFECT PERMIT PARAMETERS AND OPERATIONAL UPSETS. SELECTION OF PROCESSES FOR THE STUDY--BYPRODUCT COKEMAKING, IRONMAKING (BLAST FURNACES), STEELMAKING (BASIC OXYGEN FURNACES), HOT FORMING, AND ACID PICKLING--WAS BASED ON POLLUTANT LOADINGS, SYSTEM COMPLEXITY, CONTROL COSTS, AND COMMONALITY AMONG MOST INTEGRATED STEEL MILLS. INFORMATION WAS BASED ON: A LITERATURE SEARCH FOR WASTEWATER-RELATED O/M PRACTICES IN THE IRON AND STEEL INDUSTRY, DISCUSSIONS WITH STATE AND REGIONAL AGENCY PERSONNEL TO IDENTIFY MAJOR AREAS OF CONCERN AND EFFECTIVE O/M PRACTICES, A REVIEW OF AGENCY FILES, DISCUSSIONS WITH WASTEWATER TREATMENT EQUIPMENT VENDORS AND CHEMICAL ADDITIVE MANUFACTURERS, AND DISCUSSIONS WITH AGENCY REPRESENTATIVES. VARIOUS STEEL MILLS WERE VISITED, AND TREATMENT PLANT OPERATORS AND ENVIRONMENTAL STAFF MEMBERS WERE INTERVIEWED. THE INFORMATION PRODUCED BY THESE VISITS INCLUDES TYPICALLY ENCOUNTERED PROBLEMS AND THEIR SOLUTIONS, TROUBLESHOOTING EFFORTS, EXTENT OF OPERATOR TRAINING, EFFORTS TO MINIMIZE THE EFFECT OR OPERATIONAL UPSETS, AND PREVENTIVE MAINTENANCE PRACTICES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011183

PUBLICATION DATE: APR 84

TITLE: DREDGING: ENVIRONMENTAL ASPECTS. 1977-MARCH, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DREDGING; *ENVIRONMENT; *ENVIRONMENTAL IMPACTS; *SEDIMENT; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 254P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB84-864370

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING VARIOUS ENVIRONMENTAL ASPECTS OF DREDGING AND DREDGE SPOIL HANDLING. THE STUDIES INCLUDE THE USE OF SPOIL SITES, POLLUTION CONTROL, EFFECTS ON WATER QUALITY, AND SEDIMENT TRANSPORT. DREDGING OPERATIONS AT SPECIFIC SITES ARE DISCUSSED. BIOLOGICAL EFFECTS ARE INCLUDED IN A COMPANION BIBLIOGRAPHY. (THIS UPDATED BIBLIOGRAPHY CONTAINS 268 CITATIONS, 59 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011209

PUBLICATION DATE: MAY 84

TITLE: PESTICIDE TOXICITY IN AQUATIC ENVIRONMENTS. JUNE, 1983 - APRIL, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA B

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *AQUATIC ENVIRONMENTS; BIBLIOGRAPHIES; ECOLOGY; *ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; *RESEARCH; *PESTICIDES; *TOXIC SUBSTANCES; *TOXICITY; *WATER QUALITY

DESCRIPTIVE NOTE: 61P. PRICE CODE:PC N01/MF N01; ORDER NO.: PB84-86531

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING PESTICIDE TOXICITY IN AQUATIC ENVIRONMENTS. BIOACCUMULATION OF TOXIC SUBSTANCES, THE MECHANISMS OF ACTION OF THESE SUBSTANCES AND ASSAY METHODS TO DETERMINE THEIR EFFECTS ARE CONSIDERED. THE SYNERGISTIC EFFECTS OF COMBINATIONS OF CHEMICAL AGENTS ARE ALSO ADDRESSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 52 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011210

PUBLICATION DATE: MAY 84

TITLE: PESTICIDE TOXICITY IN AQUATIC ENVIRONMENTS. 1977 - MAY, 1984 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *AQUATIC ENVIRONMENTS; BIBLIOGRAPHIES; ECOLOGY; *ENVIRONMENT; *ENVIRONMENTAL INFLUENCES; *RESEARCH; *PESTICIDES; *TOXIC SUBSTANCES; *TOXICITY; *WATER QUALITY

DESCRIPTIVE NOTE: 438P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-865344

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING PESTICIDE TOXICITY IN AQUATIC ENVIRONMENTS. BIOACCUMULATION OF TOXIC SUBSTANCES, THE MECHANISMS OF ACTION OF THESE SUBSTANCES AND ASSAY METHODS TO DETERMINE THEIR EFFECTS ARE CONSIDERED. THE SYNERGISTIC EFFECTS OF COMBINATIONS OF CHEMICAL AGENTS ARE ALSO ADDRESSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 323 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011211

PUBLICATION DATE: MAY 84

TITLE: DREDGING: BIOLOGICAL EFFECTS. 1979 - MARCH, 1984 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BIOLOGICAL EFFECTS; *DREDGING; *ECOLOGY; *ENVIRONMENTAL INFLUENCES; *RESEARCH

DESCRIPTIVE NOTE: 158P. PRICE CODE: PC N01/MF N01; ORDER NO.: PB84-864636

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE RELATION OF DREDGING TO BIOLOGY IN ESTUARIES, MARSHES, HARBORS, CHANNELS, AND WATERWAYS. SOME OF THE TOPICS INCLUDE WILDLIFE HABITAT OF DREDGE SPOIL SITES, ECOSYSTEM STUDIES, AND DETRIMENTAL EFFECTS OF DREDGE MATERIAL. (THIS UPDATED BIBLIOGRAPHY CONTAINS 154 CITATIONS, 39 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011212

PUBLICATION DATE: JUN 79

TITLE: ENVIRONMENTAL POLLUTION CONTROL ALTERNATIVES: ECONOMICS OF WASTEWATER TREATMENT ALTERNATIVES FOR THE ELECTROPLATING INDUSTRY.

PERSONAL AUTHOR: CENTEC CORP.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *COSTS; *ECONOMICS; *ELECTROPLATING INDUSTRY; *INDUSTRY; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *REGULATIONS; *TECHNOLOGY; *WASTEWATER TREATMENT; WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 79P. PRICE CODE: PC A05/MF A01; ORDER NO.: PB84-184555

ABSTRACT: THIS REPORT ADDRESSES THE ECONOMICS OF WASTEWATER TREATMENT ALTERNATIVES AS A GUIDE FOR MINIMIZING THE COSTS OF MEETING WATER POLLUTION CONTROL REQUIREMENTS. INITIALLY, OPERATING AND INVESTMENT COSTS ARE PRESENTED FOR CONVENTIONAL WASTEWATER TREATMENT SYSTEMS EMPLOYED BY THE ELECTROPLATING INDUSTRY. THESE SYSTEMS ARE THEN COMPARED WITH ALTERNATIVE TECHNOLOGIES THAT MAY OFFER COST SAVINGS. FINALLY, MODIFICATIONS CAPABLE OF REDUCING RAW MATERIAL USE AND POLLUTION COSTS ARE DESCRIBED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011213

PUBLICATION DATE: SEP 83

TITLE: DEVELOPMENT DOCUMENT FOR FINAL EFFLUENT LIMITATIONS GUIDELINES, NEW SOURCE PERFORMANCE STANDARDS AND PRETREATMENT STANDARDS FOR THE

PERSONAL AUTHOR: HUND, F. H.

DESCRIPTOR: *EFFLUENTS; *EFFLUENT LIMITATIONS; *GUIDELINES; *INDUSTRY; *PHARMACEUTICALS; *PHARMACEUTICAL INDUSTRY; *PRETREATMENT; *STANDARDS; *TECHNOLOGY; *WASTEWATER; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 272P. PRICE CODE: PC A12/MF A01; ORDER NO.: PB84-180066

ABSTRACT: THIS DOCUMENT PRESENTS THE FINDINGS OF A STUDY OF THE PHARMACEUTICAL MANUFACTURING POINT SOURCE CATEGORY FOR THE PURPOSE OF FINALIZING EFFLUENT LIMITATIONS GUIDELINES FOR EXISTING AND NEW POINT SOURCES AND TO ESTABLISH PRETREATMENT STANDARDS FOR EXISTING AND NEW DISCHARGERS TO PUBLICLY OWNED TREATMENT WORKS TO IMPLEMENT SECTIONS 301, 303, 306, 307, 308 AND 501 OF THE CLEAN WATER ACT. THE INFORMATION PRESENTED SUPPORTS FINAL REGULATIONS BASED ON BEST PRACTICABLE CONTROL TECHNOLOGY CURRENTLY AVAILABLE (BPT) AND BEST AVAILABLE TECHNOLOGY (BAT), NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND PRETREATMENT STANDARDS FOR NEW AND EXISTING SOURCES (CPSNS) AND (PSES) FOR THE PHARMACEUTICAL MANUFACTURING POINT SOURCE CATEGORY. THE REPORT PRESENTS AND DISCUSSES DATA GATHERING EFFORTS, CONSIDERATION OF SUBCATEGORIZATION, CHARACTERIZATION OF WASTEWATERS, SELECTION OF POLLUTANT PARAMETERS, REVIEW OF TREATMENT TECHNOLOGY, COST AND NON-WATER QUALITY CONSIDERATIONS AND DEVELOPMENT OF REGULATORY OPTIONS AND EFFLUENT LIMITATIONS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

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IRIS ACCESSION NUMBER: EW011214

PUBLICATION DATE: MAR 84

TITLE: ESTIMATING COSTS OF GRANULAR ACTIVATED CARBON TREATMENT FOR WATER AND WASTEWATER.

PERSONAL AUTHOR: DE WOLF, G.; AND OTHERS

DESCRIPTOR: *ACTIVATED CARBON; *COSTS; *ECONOMICS; *GRANULAR ACTIVATED CARBON; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 256P. PRICE CODE: PC A12/MF A01; ORDER NO.: PB84-178656

ABSTRACT: THIS REPORT DISCUSSES DESIGN CONSIDERATIONS AND PRESENTS SYSTEM MODULE COSTS FOR CONCEPTUAL COST ESTIMATING OF GRANULAR ACTIVATED CARBON SYSTEMS FOR WATER AND WASTEWATER TREATMENT. IT ILLUSTRATES THE DEVELOPMENT OF TOTAL SYSTEM COSTS USING THE SYSTEM MODULE COSTS. SECTION 2

OF THE REPORT DESCRIBES THE BACKGROUND FOR GRANULAR ACTIVATED CARBON USE IN THREE APPLICATION AREAS: DRINKING WATER, MUNICIPAL WASTEWATER, AND INDUSTRIAL WASTEWATER TREATMENT. SECTION 3 COVERS DESIGN CONSIDERATIONS FOR GAC SYSTEMS. SECTION 4 DESCRIBES PROCESS MODULES AND PRESENTS MODULAR COST DATA IN TERMS OF DIRECT CAPITAL COSTS AND PROCESSING EXPENSES. IN SECTION 5, THE MODULAR COSTS ARE COMBINED AND DEVELOPED INTO SYSTEM COSTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011215

PUBLICATION DATE: APR 83

TITLE: MODELING OF WATER QUANTITY AND QUALITY FOR RIVER-BASIN PLANNING.

PERSONAL AUTHOR: DINGMAN, S. L.

DESCRIPTOR: *MODELS; *PLANNING; *RIVER BASINS; *RIVERS; *WATER QUALITY; *WATER RESOURCES; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 88P. PRICE CODE: PC A05/MF A01; ORDER NO.: PB84-163179

ABSTRACT: THE OBJECT OF THIS STUDY WAS TO DEVELOP AND TEST A RIVER-BASIN PLANNING MODEL INCORPORATING THE EFFECTS OF POINT AND NONPOINT SOURCES OF POLLUTION ON WATER QUALITY. THE MODEL SIMULATES THE QUANTITY AND QUALITY RELATIONS IN A RIVER NETWORK UNDER CRITICAL LOW-FLOW CONDITIONS, AND INCORPORATES PRECISE AND HYDROLOGICALLY SOUND DEFINITIONS OF DEMAND AND SUPPLY. FLOW AND WATER QUALITY ARE MODELED AT USE SITES (MUNICIPALITIES OR INDUSTRIAL LOCATIONS) BY SIMPLE EQUATIONS THAT ALLOW PLANNERS TO EVALUATE THE EFFECTS OF A COMPLETE SET OF STRUCTURAL AND NON-STRUCTURAL ALTERNATIVES FOR MEETING FUTURE WATER DEMANDS. THE MODEL WAS USED TO COMPUTE CRITICAL DISSOLVED-OXYGEN CONCENTRATIONS FOR THE MERRIMACK RIVER BASIN IN NEW HAMPSHIRE, AND SHOWED ENCOURAGING CORRESPONDENCE WITH MEASURED VALUES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011216

PUBLICATION DATE: 82

TITLE: REGULATION OF LAND USE PRACTICES FOR AREAS SURROUNDING AQUIFERS: ECONOMIC AND LEGAL IMPLICATIONS.

PERSONAL AUTHOR: HUFFMIRE, M. M.; AND OTHERS

DESCRIPTOR: *AQUIFERS; *ECONOMICS; *GROUNDWATER; *LAND USE; *LEGAL IMPLICATIONS; *MANAGEMENT; *PLANNING; *REGULATIONS; *WATER RESOURCES

DESCRIPTIVE NOTE: 358P. PRICE CODE: PC A16/MF A01; ORDER

NO.: PB84-159763

ABSTRACT: REGIONAL INCREASES IN THE DEMAND FOR WATER HAVE LED TO A GROWING DESIRE TO TAP UNDERGROUND WATER SOURCES. EVIDENCE INDICATES THAT MANY OF CONNECTICUT'S COMMERCIALLY FEASIBLE AQUIFERS ARE ALREADY BADLY DEGRADED, AND THAT WITHOUT IMMEDIATE ACTION TO RESTRICT HARMFUL SURFACE PRACTICES, THEY WILL BE FOLLOWED BY OTHERS. ECONOMIC EVIDENCE INDICATES THAT THE STATE AS A WHOLE CAN REAP SUBSTANTIAL BENEFITS BY AN INTELLIGENTLY CONCEIVED AND IMPLEMENTED PROGRAM OF LAND USE MONITORING AND WATER RESOURCE PLANNING, BUT THAT SUCH A PROGRAM CAN ONLY BE UNDERTAKEN THROUGH ADDITIONAL LEGISLATION AND FUNDING. CURRENT LEGAL MECHANISMS FOR THE ORDERLY MANAGEMENT OF WATER RESOURCES ARE INSUFFICIENT AND NEED OVERHAUL. GREATER STRESS MUST BE PLACED ON COMPREHENSIVE LONG-TERM PLANNING ON THE REGIONAL LEVEL, AND STRONG INSTITUTIONAL ARRANGEMENTS TO IMPLEMENT THIS PLANNING PROCESS ARE NECESSARY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011217

PUBLICATION DATE: 83

TITLE: LABORATORY MANUAL FOR THE DETERMINATION OF METALS IN WATER AND WASTEWATER BY ATOMIC ABSORPTION SPECTROPHOTOMETRY.

PERSONAL AUTHOR: SMITH, R.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ATOMIC ABSORPTION SPECTROPHOTOMETRY; *INSTRUCTIONAL MATERIALS; *LABORATORY MANUALS; *LABORATORY PROCEDURES; *METALS; *POSTSECONDARY EDUCATION; *SPECTROPHOTOMETRY; *WATER; *WASTEWATER; *WATER QUALITY

DESCRIPTIVE NOTE: 36P. PRICE CODE: PC A03/MF A01; ORDER NO.: N84-20653/1

ABSTRACT: THE BASIC PRINCIPLES AND PRACTICAL ASPECTS OF ATOMIC ABSORPTION SPECTROPHOTOMETRY ARE DISCUSSED. A SCHEME OF ANALYSIS FOR DETERMINATION OF 19 METALS IN WATER AND WASTEWATER, 16 BY FLAME ATOMIC ABSORPTION AND 3 BY VAPOR GENERATION TECHNIQUES ARE GIVEN. SIMPLICITY, SPEED, AND ACCURACY WERE THE MAIN CRITERIA CONSIDERED IN THE SELECTION OF THE VARIOUS METHODS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW011221

PUBLICATION DATE: JUN 84

TITLE: SYSTEMS ANALYSIS.

PERSONAL AUTHOR: RECKHOW, KENNETH H.

DESCRIPTOR: ASSESSMENT; *LITERATURE REVIEWS; *MANAGEMENT;

MODELING; *MONITORING; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *STATE-OF-THE-ART REVIEWS; *SYSTEMS ANALYSIS; WASTEWATER TREATMENT; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 494-96P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW ISSUE (EW 9332). A DETAILED REVIEW OF THE LITERATURE IS PROVIDED FOR THE VARIOUS TOPICS RELATING TO SYSTEMS ANALYSIS AND WATER RESOURCES. TOPICS ADDRESSED INCLUDE WATER QUALITY MODELING AND ASSESSMENTS, WATER QUALITY MANAGEMENT, STORMWATER AND WASTEWATER MANAGEMENT; WATER QUALITY MONITORING, AND TOXIC CONTAMINANTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011222

PUBLICATION DATE: JUN 84

TITLE: ECONOMICS.

PERSONAL AUTHOR: ELLERBROCK, M. J.

DESCRIPTOR: *COST-BENEFIT ANALYSIS; COSTS; *ENVIRONMENTAL POLICY; *ECONOMICS; *LITERATURE REVIEWS; *NONPOINT POLLUTION; *PUBLIC POLICY; *POLICIES; *WASTEWATER TREATMENT; *WATER RESOURCES; *WATER QUALITY; *MANAGEMENT

DESCRIPTIVE NOTE: 497-99P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW ISSUE (EW 9333). A DETAILED REVIEW OF THE LITERATURE IS PROVIDED FOR ECONOMICS AND WATER RESOURCES. SOME NEW APPROACHES TO ECONOMICS, MANAGEMENT, AND ENVIRONMENTAL POLICY ARE IDENTIFIED. OTHER PAPERS CONCERNED WITH TREATMENT COSTS, COST-BENEFIT ANALYSIS, AND NON-POINT POLLUTION ARE INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011223

PUBLICATION DATE: JUN 84

TITLE: LAW.

PERSONAL AUTHOR: COX, WILLIAM E.

DESCRIPTOR: *CLEAN WATER ACT; *DRINKING WATER; *ENVIRONMENTAL PROTECTION AGENCY; *HAZARDOUS SUBSTANCES; *LEGAL ASPECTS; *LEGISLATION; *LITERATURE REVIEWS; *POLLUTION CONTROL; *OPERATIONS (WASTEWATER); *WATER QUALITY; *WATER TREATMENT; *WASTEWATER TREATMENT; ACID RAIN

DESCRIPTIVE NOTE: 499-501P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW ISSUE (EW 9334). A DETAILED REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO THE LEGAL ASPECTS OF POLLUTION CONTROL AND WATER QUALITY. TOPICS ADDRESSED INCLUDE CHANGES IN THE CLEAN WATER ACT, JUDICIAL INTERPRETATION OF THE CLEAN WATER ACT, LAND APPLICATION OF MUNICIPAL WASTEWATER, POLLUTION BY HAZARDOUS SUBSTANCES, MARINE POLLUTION, ACID RAIN, AND NONPOINT POLLUTION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011224

PUBLICATION DATE: JUN 84

TITLE: CHEMICAL ANALYSIS OF WATER AND WASTEWATER: INORGANICS.

PERSONAL AUTHOR: POLCYN, DANIEL S.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *DATA ANALYSIS; *INORGANIC COMPOUNDS; *LABORATORY PROCEDURES; *LITERATURE REVIEWS; *COMPUTER APPLICATIONS; *METALS; *SAMPLING; *TRACE METALS; *WATER QUALITY; *CHEMICAL ANALYSIS

DESCRIPTIVE NOTE: 502-22P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9335). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO INORGANIC SUBSTANCES. TOPICS COVERED INCLUDE COMPUTERS IN ANALYSIS, DATA ANALYSIS AND TREATMENT, TRACE ANALYSIS, SAMPLING, PRECONCENTRATION OF TRACE METALS, AND DETERMINATION OF METAL SPECIES. A DETAILED BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011225

PUBLICATION DATE: JUN 84

TITLE: CHEMICAL ANALYSIS OF WATER AND WASTEWATER: ORGANICS.

PERSONAL AUTHOR: ADAMS, V. DEAN; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; CHEMICAL ANALYSIS; DETERGENTS; *HYDROCARBONS; *LITERATURE REVIEWS; *ORGANIC COMPOUNDS; PESTICIDES; *RESEARCH REPORTS; SURFACTANTS; *WATER; *WASTEWATER; *WATER QUALITY

DESCRIPTIVE NOTE: 522-44P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9337). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ORGANIC COMPOUNDS. TOPICS ADDRESSED INCLUDE TOTAL ORGANIC

DETERMINATION, DETERGENTS, ALIPHATIC AND AROMATIC HYDROCARBONS, PESTICIDES, CHLORINATED HYDROCARBONS, AND ORGANICS IN WATER AND WASTEWATER. A DETAILED BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011226

PUBLICATION DATE: JUN 84

TITLE: CHEMICAL ANALYSIS OF WATER AND WASTEWATER: WATER CHARACTERISTICS.

PERSONAL AUTHOR: BANDY, JOHN T.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; COLOR; *LITERATURE REVIEWS; RADIOACTIVITY; *RESEARCH REPORTS; SEDIMENTS; SUSPENDED SOLIDS; *WATER CHARACTERISTICS; *WATER QUALITY

DESCRIPTIVE NOTE: 544-48P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9336). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO WATER CHARACTERISTICS. TOPICS INCLUDED ARE ACID RAIN, WATER QUALITY, SEDIMENTS, RADIOACTIVITY, ACIDITY, AND ALKALINITY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011227

PUBLICATION DATE: JUN 84

TITLE: CHEMICAL ANALYSIS OF WATER AND WASTEWATER: CONTINUOUS MONITORING, AUTOMATED ANALYSIS, AND SAMPLING PROCEDURES.

PERSONAL AUTHOR: PITT, W. W., JR.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AUTOMATED ANALYSIS; *CONTINUOUS MONITORING; *INSTRUMENTATION; *MONITORING; *SAMPLING; *WASTEWATER; *WATER QUALITY

DESCRIPTIVE NOTE: 548-50P.

ABSTRACT: THIS ARTICLE CONSIDERS LITERATURE RELATED TO CONTINUOUS MONITORING, AUTOMATED ANALYSIS, AND SAMPLING PROCEDURES OF WASTEWATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011228

PUBLICATION DATE: JUN 84

TITLE: WASTEWATER TREATMENT: WASTEWATER COLLECTION.

PERSONAL AUTHOR: HOLLENBECK, ALAN J.

DESCRIPTOR: *DESIGN; *CONSTRUCTION; *FACILITIES; *LITERATURE REVIEWS; *MAINTENANCE; *RESEARCH REPORTS; *REHABILITATION; *SAFETY; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 551-53P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW. A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO WASTEWATER COLLECTION. TOPICS ADDRESSED INCLUDE PLANNING, SEWER SURVEY AND REHABILITATION, SAFETY, WASTEWATER PUMPING, AND MAINTENANCE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011229

PUBLICATION DATE: JUN 84

TITLE: WASTEWATER TREATMENT - PHYSICAL AND CHEMICAL METHODS.

PERSONAL AUTHOR: PETERS, ROBERT W.; AND OTHERS

DESCRIPTOR: ADSORPTION; *CHEMICAL TREATMENT; COAGULATION; ION EXCHANGE; *LITERATURE REVIEWS; MEMBRANE PROCESSES; *OPERATIONS (WASTEWATER); OXIDATIVE PROCESSES; *PHYSICAL TREATMENT; *RESEARCH REPORTS; SOLIDS SEPARATION; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 553-68P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW. A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO PHYSICAL AND CHEMICAL METHODS OF WASTEWATER TREATMENT. TOPICS ADDRESSED INCLUDE PROCESS TECHNOLOGY, MIXING, FLUID FLOW, PRECIPITATION, COAGULATION, SOLID-LIQUID SEPARATION, ADSORPTION, ION EXCHANGE, SEPARATION PROCESSES, CORROSION CONTROL, OXIDATIVE PROCESSES, AND MEMBRANE PROCESSES. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011230

PUBLICATION DATE: JUN 84

TITLE: ACTIVATED SLUDGE.

PERSONAL AUTHOR: ALLEMAN, J. E.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; DESIGN; INDUSTRIAL WASTES; INSTRUMENTATION; *LITERATURE REVIEWS; MODELING; NITROGEN; PROCESS CONTROL; OXYGEN UPTAKE; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 568-77P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9340). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ACTIVATED SLUDGE. TOPICS ADDRESSED INCLUDE PROCESS MODELING, PROCESS RESEARCH, DESIGN AND PERFORMANCE, PROCESS CONTROL, INDUSTRIAL WASTEWATERS, NITROGEN METABOLISM, SLUDGE CHARACTERISTICS, AND OXYGEN UPTAKE AND OXYGEN TRANSFER. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011231

PUBLICATION DATE: JUN 84

TITLE: BIOLOGICAL FIXED-FILM SYSTEMS.

PERSONAL AUTHOR: PAUSE, S. M.; SWITZENBAUM, M. S.

DESCRIPTOR: *BIOLOGICAL CONTACTORS; *BIOLOGICAL FIXED-FILM SYSTEMS; *FACILITIES; *LITERATURE REVIEWS; *OPERATIONS (WASTEWATER); *RESEARCH; *TRICKLING FILTERS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 577-80P.

ABSTRACT: THIS ARTICLE REVIEWS LITERATURE RELATED TO BIOLOGICAL FIXED-FILM SYSTEMS FOR WASTEWATER. TOPICS COVERED INCLUDE ROTATING BIOLOGICAL CONTACTORS, TRICKLING FILTERS, FLUIDIZED BED REACTORS, BIOFILM CHARACTERISTICS, BIOFILM MODELING, AND FIXED FILM PROCESSES AND SYSTEMS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011232

PUBLICATION DATE: JUN 84

TITLE: LAGOONS, PONDS, AND AEROBIC DIGESTION.

PERSONAL AUTHOR: BRYANT, CURTIS W.

DESCRIPTOR: *DESIGN; *FACILITIES; *LAGOONS; *LITERATURE REVIEWS; MODELS; *OXIDATION PONDS; *PERFORMANCE EVALUATION; PROCESS CONTROL; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 580-82P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9341). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO LAGOONS AND OXIDATION PONDS. TOPICS ADDRESSED INCLUDE PROCESS DESIGN, PROCESS PERFORMANCE, BIOLOGY, AND AEROBIC DIGESTION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011233

PUBLICATION DATE: JUN 84

TITLE: DENITRIFICATION.

PERSONAL AUTHOR: PRAKASAM, T. B. S.

DESCRIPTOR: *DENITRIFICATION; EQUIPMENT; *LITERATURE REVIEWS; MICROBIOLOGY; *RESEARCH REPORTS; SLURRY PROCESSES; *SOILS; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 582-86P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9343). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO DENITIRIFICATION. TOPICS ADDRESSED INCLUDE WATER AND SOIL SYSTEMS, SLURRY SYSTEMS, AND ATTACHED GROWTH SYSTEMS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011234

PUBLICATION DATE: JUN 84

TITLE: ANAEROBIC PROCESSES.

PERSONAL AUTHOR: FANNIN, KERBY F.; AND OTHERS

DESCRIPTOR: *ANAEROBIC DIGESTION; ECONOMIC FACTORS; ENERGY; *LITERATURE REVIEWS; MICROBIOLOGY; *OPERATIONS (WASTEWATER); PERFORMANCE EVALUATION; PROCESS DESCRIPTIONS; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 586-93P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9342). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ANAEROBIC PROCESSES. TOPICS ADDRESSED INCLUDE MICROBIOLOGY, PROCESS STABILITY, PROCESS OPTIMIZATION, ENERGY AND ECONOMIC ASSESSMENT, AND PROCESS APPLICATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011235

PUBLICATION DATE: JUN 84

TITLE: SLUDGE TREATMENT, UTILIZATION, AND DISPOSAL.

PERSONAL AUTHOR: HASIT, YAKIR

DESCRIPTOR: *DEWATERING; *INCINERATION; *LITERATURE REVIEWS; *RESEARCH REPORTS; *SLUDGE; *SLUDGE STABILIZATION; *SLUDGE TREATMENT; *SLUDGE UTILIZATION; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 593-98P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9344). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO SLUDGE TREATMENT, UTILIZATION, AND DISPOSAL. TOPICS ADDRESSED INCLUDE SLUDGE PROPERTIES, THERMAL TREATMENT AND INCINERATION, THICKENING, DEWATERING, STABILIZATION, AND ULTIMATE DISPOSAL AND USE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011236

PUBLICATION DATE: JUN 84

TITLE: ON-SITE ALTERNATIVES FOR TREATMENT AND DISPOSAL.

PERSONAL AUTHOR: DEESE, P. L.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGIES; CASE STUDIES; *DESIGN; *FACILITIES; *LITERATURE REVIEWS; *MANAGEMENT; *ONSITE DISPOSAL; *ONSITE TREATMENT; *RESEARCH REPORTS; *SANITATION; *SEPTIC TANKS; *SOILS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 598-602P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9345). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ONSITE ALTERNATIVES FOR TREATMENT AND DISPOSAL. TOPICS ADDRESSED INCLUDE SUBSURFACE DISPOSAL SYSTEMS, SANITATION IN DEVELOPING COUNTRIES, COMMUNITY SYSTEMS AND MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011237

PUBLICATION DATE: JUN 84

TITLE: DISINFECTION.

PERSONAL AUTHOR: VENOSA, ALBERT D.; RAM, NEIL

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *DISINFECTION; *INORGANIC COMPOUNDS; *LITERATURE REVIEWS; *MICROBIOLOGY; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *RESEARCH REPORTS; *TRIHALOMETHANES; *WATER QUALITY; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 602-14P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9347). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO DISINFECTION. TOPICS ADDRESSED INCLUDE MICROBIOLOGY, ANALYTICAL METHODS, TRIHALOMETHANES, CHEMICAL REACTIONS, AND BY PRODUCTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011238

PUBLICATION DATE: JUN 84

TITLE: OPTIMIZATION OF TREATMENT PLANT OPERATION.

PERSONAL AUTHOR: KUGELMAN, IRWIN J.; HOUTHOOFD, JANET M.

DESCRIPTOR: *COMPUTER APPLICATIONS; *INSTRUMENTATION; *LITERATURE REVIEWS; *MAINTENANCE; *MODELING; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *TECHNOLOGICAL ADVANCEMENTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 614-16P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9346). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATED TO OPTIMIZATION OF TREATMENT PLANT OPERATION. TOPICS ADDRESSED INCLUDE PROCESS CONTROL AND MODELLING, INSTRUMENTATION, OPERATIONS AND MAINTENANCE, AND ENERGY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011239

PUBLICATION DATE: JUN 84

TITLE: WATER RECLAMATION AND REUSE.

PERSONAL AUTHOR: HRUDEY, STEVE E.; PUTZ, GORDON

DESCRIPTOR: AGRICULTURE; *COMMERCIAL WATER USE; *DOMESTIC WATER USE; GROUNDWATER; *INDUSTRY; IRRIGATION; *LITERATURE REVIEWS; *RECYCLING; *RESEARCH REPORTS; TECHNOLOGY; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY; *WATER RECLAMATION; *WATER RESOURCES; *WATER REUSE

DESCRIPTIVE NOTE: 616-20P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9349). A REVIEW OF THE

LITERATURE IS PROVIDED FOR TOPICS RELATING TO WATER RECLAMATION AND REUSE. TOPICS ADDRESSED INCLUDE WATER RESOURCES PLANNING, AGRICULTURE AND IRRIGATION, GROUNDWATER RECHARGE, INDUSTRIAL WATER REUSE, DOMESTIC REUSE, AND TECHNOLOGY DEVELOPMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011240

PUBLICATION DATE: JUN 84

TITLE: LAND APPLICATION OF WASTEWATER.

PERSONAL AUTHOR: ABERNATHY, A. RAY; AND OTHERS

DESCRIPTOR: *CASE STUDIES; *LAND APPLICATION; *LITERATURE REVIEWS; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 620-21P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9350). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO LAND APPLICATION OF WASTEWATERS. TOPICS ADDRESSED INCLUDE CASE STUDIES AND OTHER REFERENCES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011241

PUBLICATION DATE: JUN 84

TITLE: URBAN RUNOFF AND COMBINED SEWER OVERFLOW.

PERSONAL AUTHOR: MOFFA, PETER E.; AND OTHERS

DESCRIPTOR: *COMBINED SEWERS; DESIGN; *HYDROLOGY; *LITERATURE REVIEWS; *MANAGEMENT; *RESEARCH REPORTS; *SEWERS; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS; *WASTEWATER COLLECTION; WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 621-25P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9351). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO URBAN RUNOFF AND COMBINED SEWER OVERFLOW. TOPICS ADDRESSED INCLUDE CHARACTERISTICS, HYDROLOGY, RECEIVING WATER, CONTROL, TREATMENT, AND MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011242

PUBLICATION DATE: JUN 84

TITLE: HEALTH EFFECTS ASSOCIATED WITH WASTEWATER TREATMENT AND DISPOSAL.

PERSONAL AUTHOR: CLARK, C. S.

DESCRIPTOR: *AQUACULTURE; *COMPOSTING; *HEALTH EFFECTS; *LAND APPLICATION; *LITERATURE REVIEWS; *PUBLIC HEALTH; *RESEARCH REPORTS; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 625-27P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9352). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO HEALTH EFFECTS ASSOCIATED WITH WASTEWATER TREATMENT AND DISPOSAL. TOPICS ADDRESSED INCLUDE WASTEWATER TREATMENT PLANTS AND COLLECTION SYSTEMS, AND LAND APPLICATION OF WASTEWATER AND SLUDGE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011243

PUBLICATION DATE: JUN 84

TITLE: MEAT, FISH, AND POULTRY PROCESSING WASTES.

PERSONAL AUTHOR: LITCHFIELD, JOHN H.

DESCRIPTOR: *FISH; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *MEAT; *POULTRY; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 628-31P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9353). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO MEAT, FISH, AND POULTRY PROCESSING WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011244

PUBLICATION DATE: JUN 84

TITLE: FRUIT, VEGETABLE, AND GRAIN PROCESSING WASTES.

PERSONAL AUTHOR: MORRELL, ROBERT A.; SCHMIDT, HAROLD E., JR.

DESCRIPTOR: *AGRICULTURAL WASTES; *FRUITS; *GRAINS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *RESEARCH REPORTS; *VEGETABLES; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 631-33P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9354). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO FRUIT, VEGETABLE, AND GRAIN PROCESSING WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011245

PUBLICATION DATE: JUN 84

TITLE: FERMENTATION INDUSTRY.

PERSONAL AUTHOR: CHIESA, STEVEN C.; MANNING, JOHN F., JR.

DESCRIPTOR: *FERMENTATION; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *RESEARCH REPORTS; *WASTE DISPOSAL; *WASTE RECOVERY; *WASTEWATER RECOVERY; *WASTEWATER RECYCLING; *WASTEWATER REUSE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 633-36P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9355). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO THE FERMENTATION INDUSTRY. TOPICS ADDRESSED INCLUDE BREWERIES, WINERIES, PHARMACEUTICALS, ALCOHOL FUEL PRODUCTION, AND DISTILLERIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011246

PUBLICATION DATE: JUN 84

TITLE: DAIRY WASTES.

PERSONAL AUTHOR: PICO, RICHARD F.; GROENEWOLD, JOHN C.

DESCRIPTOR: *AGRICULTURAL WASTES; *CASE STUDIES; *DAIRY WASTES; *INDUSTRIAL WASTES; *LAND APPLICATION; *LITERATURE REVIEWS; *RESEARCH REPORTS; *WASTE DISPOSAL; *WASTEWATER TREATMENT; *MANAGEMENT

DESCRIPTIVE NOTE: 636-37P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9356). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO DAIRY WASTES. TOPICS ADDRESSED INCLUDE CASE HISTORIES, AND WASTE MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011247

PUBLICATION DATE: JUN 84

TITLE: AGRICULTURAL WASTES.

PERSONAL AUTHOR: HILTON, B. L.; AND OTHERS

DESCRIPTOR: *AGRICULTURAL WASTES; *BIOLOGICAL TREATMENT; *CHEMICAL TREATMENT; *ECONOMICS; *LITERATURE REVIEWS; *INDUSTRIAL WASTES; *MANAGEMENT; *ODOR CONTROL; *RESEARCH REPORTS; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 637-42P.

ABSTRACT: THIS ARTICLE REVIEWS LITERATURE ON AGRICULTURAL WASTES. TOPICS CONSIDERED INCLUDE (1) BIOLOGICAL TREATMENT, PERFORMANCE, AND KINETICS, (2) PHYSICO-CHEMICAL TREATMENT, (3) TREATMENT OF COMBINED SUBSTRATES, (4) DESIGN, OPERATION, AND PRETREATMENT, (5) FEEDSTUFFS, (6) ODOR CONTROL, AND ECONOMIC ANALYSES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011248

PUBLICATION DATE: JUN 84

TITLE: TEXTILE WASTEWATER.

PERSONAL AUTHOR: JUDKINS, J. F., JR.

DESCRIPTOR: *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *RESEARCH REPORTS; *TEXTILES; *WASTE DISPOSAL; *WASTE RECOVERY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 642P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9357). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO TEXTILE WASTEWATER.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011249

PUBLICATION DATE: JUN 84

TITLE: PULP AND PAPER EFFLUENT MANAGEMENT.

PERSONAL AUTHOR: GILLESPIE, WILLIAM J.

DESCRIPTOR: BIOLOGICAL TREATMENT; *ECONOMICS; *EFFLUENTS; *FOREST PRODUCTS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PAPER INDUSTRY; *PULP INDUSTRY; *RESEARSH REPORTS; *WASTE DISPOSAL; *WASTE

MANAGEMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 643-47P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9358). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO PULP AND PAPER EFFLUENT MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011250

PUBLICATION DATE: JUN 84

TITLE: COAL AND COAL MINE DRAINAGE.

PERSONAL AUTHOR: OLEM, HARVEY

DESCRIPTOR: *COAL; *COAL CLEANING; *COAL INDUSTRY; *COAL MINE DRAINAGE; *ENVIRONMENTAL IMPACTS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *MINING; *POLLUTION CONTROL; *RESEARCH REPORTS; STORAGE; TRANSPORTATION; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 647-51P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9359). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO COAL AND COAL MINE DRAINAGE. TOPICS ADDRESSED INCLUDE COAL MINING, COAL CLEANING, AND COAL TRANSPORTATION AND STORAGE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011251

PUBLICATION DATE: JUN 84

TITLE: PETROLEUM PROCESSING AND SYNTHETIC FUELS.

PERSONAL AUTHOR: COWAN, BRENT W.; STOVER, ENOS L.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *EFFLUENTS; *ENVIRONMENTAL IMPACTS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *PETROLEUM; *RESEARCH REPORTS; *SYNTHETIC FUELS; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 651-54P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9360). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO PETROLEUM PROCESSING AND SYNTHETIC FUELS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011252

PUBLICATION DATE: JUN 84

TITLE: POWER INDUSTRY WASTES.

PERSONAL AUTHOR: CHU, T. JULIAN; IWANSKI, MYRON L.

DESCRIPTOR: *ENERGY; FLUIDIZED-BED COMBUSTION; FOSSIL FUELS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; NUCLEAR POWER; *POWER PRODUCTION; *POWER INDUSTRY; REGULATIONS; *RESEARCH REPORTS; *WASTE HEAT UTILIZATION; *WASTE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 654-64P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9361). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO POWER INDUSTRY WASTES. TOPICS ADDRESSED INCLUDE ENVIRONMENTAL REGULATION, HYDROELECTRIC POWER PLANTS, FOSSIL-FUELED POWER PLANTS, NUCLEAR POWER PLANTS, FLUIDIZED BED COMBUSTION, AND WASTE HEAT UTILIZATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011253

PUBLICATION DATE: JUN 84

TITLE: STEEL INDUSTRY WASTES.

PERSONAL AUTHOR: CHUNG, N. K.

DESCRIPTOR: *COKE PRODUCTION; *ENVIRONMENTAL IMPACTS; *INDUSTRIAL WASTES; *POLLUTION CONTROL; *RESEARCH REPORTS; *STEEL INDUSTRY; *TECHNOLOGY; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 664-66P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9362). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO STEEL INDUSTRY WASTES. TOPICS ADDRESSED INCLUDE REGULATIONS, WATER QUALITY, COKE PRODUCTION, BLAST FURNACES, AND SHAPING AND COATING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011254

PUBLICATION DATE: JUN 84

TITLE: ELECTROPLATING AND CYANIDE WASTES.

PERSONAL AUTHOR: KNOCKE, WILLIAM R.

DESCRIPTOR: *CYANIDE; *ELECTROPLATING; *HEAVY METALS;

*INDUSTRIAL WASTES; *LITERATURE REVIEWS; *POLLUTION CONTROL; *REGULATIONS; *RESEARCH REPORTS; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 666-67P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9363). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO ELECTROPLATING AND CYANIDE WASTES. TOPICS ADDRESSED INCLUDE REGULATIONS, TREATMENT AND RECOVERY TECHNIQUES, AND DETECTION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011255

PUBLICATION DATE: JUN 84

TITLE: CHEMICALS AND ALLIED PRDUCTS.

PERSONAL AUTHOR: SIEGRIST, T. W.

DESCRIPTOR: *BIOLOGICAL TREATMENT; *CHEMICAL INDUSTRY; *CHEMICALS; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *POLLUTION CONTROL; *RESEARCH REPORTS; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 667-77P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9364). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO CHEMICALS AND ALLIED PRODUCTS. TOPICS ADDRESSED INCLUDE WASTEWATER TREATMENT BY PRODUCT TYPE, SOURCE TREATMENT, BIOLOGICAL TREATMENT, AND PHYSICAL/CHEMICAL TREATMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011256

PUBLICATION DATE: JUN 84

TITLE: RADIOACTIVE WASTES.

PERSONAL AUTHOR: BOEGLY, WILLIAM J., JR.; ALEXANDER, HARRY J.

DESCRIPTOR: *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *MONITORING; NUCLEAR POWER; RADIOACTIVE MATERIALS; *RADIOACTIVE WASTES; *RESEARCH REPORTS; RISK ASSESSMENT; *STORAGE; TRANSPORTATION; *WASTE DISPOSAL; *WASTE MANAGEMENT

DESCRIPTIVE NOTE: 677-86P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9365). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO RADIOACTIVE WASTES. TOPICS ADDRESSED INCLUDE ISOLATION OF WASTES, WASTE MANAGEMENT, STORAGE, ENVIRONMENTAL TRANSPORT, TRANSPORTATION, RISK ASSESSMENT, AND REMEDIAL ACTION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011257

PUBLICATION DATE: JUN 84

TITLE: SOLID WASTES AND WATER QUALITY.

PERSONAL AUTHOR: BROWER, GEORGE R.

DESCRIPTOR: ENVIRONMENTAL IMPACTS; ENERGY; FACILITIES; *GROUNDWATER; *HAZARDOUS WASTES; *INDUSTRIAL WASTES; *LITERATURE REVIEWS; *RESEARCH REPORTS; *SOLID WASTES; *WASTE DISPOSAL; *WASTE MANAGEMENT; *WASTE TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 686-88P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9366). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO SOLID WASTES AND WATER QUALITY. TOPICS ADDRESSED INCLUDE WATER QUALITY, CHARACTERIZATION AND TREATMENT, ENERGY, AND HAZARDOUS WASTES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011258

PUBLICATION DATE: JUN 84

TITLE: NON-POINT SOURCES.

PERSONAL AUTHOR: YOUNOS, T. M.; AND OTHERS

DESCRIPTOR: *LITERATURE REVIEWS; *MANAGEMENT; *MODELING; *MONITORING; *NONPOINT SOURCE POLLUTION; *POLLUTION CONTROL; *RESEARCH REVIEWS; *WATER QUALITY; *WATER POLLUTION; *WATERSHEDS

DESCRIPTIVE NOTE: 689-92P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9367). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO NON-POINT SOURCES. TOPICS ADDRESSED INCLUDE IMPACT, SOURCES, AND MODELING.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011259

PUBLICATION DATE: JUN 84

TITLE: MIXING AND TRANSPORT.

PERSONAL AUTHOR: ROBERTS, PHILIP J. W.

DESCRIPTOR: *AQUATIC ENVIRONMENTS; *ESTUARIES; *LAKES; *LITERATURE REVIEWS; *POLLUTION CONTROL; *RESEARCH REPORTS; *RIVERS; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 692-97P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9368). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO MIXING AND TRANSPORT. TOPICS ADDRESSED INCLUDE STREAMS AND RIVERS; LAKES, RESERVOIRS, AND COOLING PONDS; ESTUARIES, HARBORS, AND SALT MARSHES; COASTAL WATERS; JETS AND PLUMES; AND STRATIFIED FLUIDS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011260

PUBLICATION DATE: JUN 84

TITLE: EUTROPHICATION.

PERSONAL AUTHOR: MEDINE, ALLEN J.; LAMARRA, VINCENT A.

DESCRIPTOR: *AQUATIC ENVIRONMENTS; *ECOLOGY; *EUTROPHICATION; *LAKES; *LITERATURE REVIEWS; *MANAGEMENT; *MODELING; *NUTRIENT LOADING; *POLLUTION CONTROL; *RESEARCH REPORTS; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 697-704P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9369). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO EUTROPHICATION. TOPICS ADDRESSED INCLUDE NUTRIENT LOADING MODELS, EUTROPHICATION INDICATORS, EUTROPHICATION AND ECOSYSTEM MODELING, NUTRIENT SOURCES AND SINKS, INTERACTIONS (BIOLOGICAL, CHEMICAL, PHYSICAL), BIOASSAY AND LABORATORY STUDIES, AND LAKE MANAGEMENT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011261

PUBLICATION DATE: JUN 84

TITLE: DISSOLVED OXYGEN IN STREAMS AND RESERVOIRS.

PERSONAL AUTHOR: BOHAC, CHARLES E.

DESCRIPTOR: *DESTRATIFICATION; *DISSOLVED OXYGEN; *GAS MEASUREMENT; *GAS TRANSFER; *LITERATURE REVIEWS; *MODELING; *REAERATION; *RESEARCH REPORTS; *RESERVOIRS; *STREAMS; *WASTEWATER; *WATER QUALITY; *MONITORING

DESCRIPTIVE NOTE: 704-07P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9370). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO DISSOLVED OXYGEN IN STREAMS AND RESERVOIRS. TOPICS ADDRESSED INCLUDE WATER QUALITY MODELS, OXYGEN DEMAND AND RESPONSE TO WASTE LOADS, IMPOUNDMENT METHODS, GAS TRANSFER, MONITORING, AND AQUATIC EFFECTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011262

PUBLICATION DATE: JUN 84

TITLE: THERMAL EFFECTS.

PERSONAL AUTHOR: HARRELSON, MICHAEL E.; AND OTHERS

DESCRIPTOR: *ECOLOGY; *ENVIRONMENTAL IMPACTS; *LITERAUTRE REVIEWS; *RESEARCH; *RESEARCH REVIEWS; *THERMAL POLLUTION; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 708-18P.

ABSTRACT: THIS ARTICLE REVIEWS LITERATURE ON THE EFFECTS OF THERMAL POLLUTION. INFORMATION DISCUSSED INCLUDES MODELS, SITE STUDIES, PRODUCERS, CONSUMERS, DISTRIBUTION, THERMAL TOLERANCE, AND OTHER ITEMS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011263

PUBLICATION DATE: JUN 84

TITLE: FATE OF ENVIRONMENTAL POLLUTANTS.

PERSONAL AUTHOR: PRITCHARD, P. H.

DESCRIPTOR: *CHEMICAL REACTIONS; *ENVIRONMENTAL IMPACTS; *HYDROCARBONS; *LITERATURE REVIEWS; *HEAVY METALS; *ORGANIC COMPOUNDS; *PESTICIDES; *POLLUTION; *RESEARCH; *RESEARCH REVIEWS

DESCRIPTIVE NOTE: 718-25P.

ABSTRACT: THIS ARTICLE REVIEWS RESEARCH ON THE FATE OF POLLUTANTS IN THE ENVIRONMENT. INFORMATION IS INCLUDED ON PESTICIDES, PETROLEUM HYDROCARBONS, CHLORINATED AROMATED HYDROCARBONS, POLYCYCLIC HYDROCARBONS, HEAVY METALS, AND OTHER ORGANIC COMPOUNDS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011264

PUBLICATION DATE: JUN 84

TITLE: EFFECTS OF POLLUTION ON FRESHWATER ORGANISMS.

PERSONAL AUTHOR: PHIPPS, GARY L.; AND OTHERS

DESCRIPTOR: *AQUATIC ENVIRONMENTS; *AQUATIC ORGANISMS; *BIOLOGY; *CHEMICALS; ECOLOGY; *ENVIRONMENTAL IMPACTS; *INVERTEBRATES; *LITERATURE REVIEWS; *FISH; INDUSTRIAL WASTES; *PLANTS; RESEARCH; *RESEARCH REVIEWS; *VERTEBRATES; *WATER QUALITY; *WATER POLLUTION

DESCRIPTIVE NOTE: 725-58P.

ABSTRACT: THIS REVIEW IS AN UPDATE TO TWO THAT APPEARED IN THE 1983 REVIEW (EW 9375 AND EW 9377). THE REVIEW ALSO INCLUDES INFORMATION OF THE EFFECT OF POLLUTION ON PLANTS. EXTENSIVE LISTS ARE PROVIDED FOR VARIOUS CHEMICALS WITH REFERENCES TO ORGANISMS FOR EACH CHEMICAL. AN EXTENSIVE BIBLIOGRAPHY IS ALSO INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011265

PUBLICATION DATE: JUN 84

TITLE: EFFECTS ON SALTWATER ORGANISMS.

PERSONAL AUTHOR: REISH, DONALD J.; AND OTHERS

DESCRIPTOR: *DREDGING; *DUMPING; *EFFLUENTS; *ESTUARIES; *LITERATURE REVIEWS; *MARINE ENVIRONMENTS; *MICROBIOLOGY; *OCEANS; *OIL DRILLING; *OIL SPILLS; *PESTICIDES; *POLLUTION CONTROL; *RESEARCH REPORTS; *WASTE DISPOSAL; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 758-74P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9371). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO MARINE POLLUTION. TOPICS ADDRESSED INCLUDE PESTICIDES, RESIDUES, SURVEYS, DISEASES AND ABNORMALITIES, DUMPING, DREDGING, MINED MATERIALS, AND OIL POLLUTION. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011266

PUBLICATION DATE: JUN 84

TITLE: FRESHWATER MACROINVERTEBRATES.

PERSONAL AUTHOR: QUIGLEY, MICHAEL A.

DESCRIPTOR: *AQUATIC ENVIRONMENTS; *AQUATIC ORGANISMS; *ECOLOGY; *INVERTEBRATES; *LITERATURE REVIEWS; *MACROINVERTEBRATES; *ORGANIC WASTES; *RESEARCH REPORTS; *SAMPLING; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 774-80P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9376). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO FRESHWATER MACROINVERTEBRATES. TOPICS ADDRESSED INCLUDE INDEXES AND INDICATORS, PHYSICAL ENVIRONMENTAL ALTERATIONS, DISTRIBUTION AND HABITAT REQUIREMENTS, FOOD AND FEEDING, PRODUCTION, PERIODICITY AND DRIFT, ANIMAL-SEDIMENT INTERACTIONS, AND METHODS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011267

PUBLICATION DATE: JUN 84

TITLE: AQUATIC SEDIMENTS.

PERSONAL AUTHOR: DEPINTO, JOSEPH V.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AQUATIC ENVIRONMENTS; *HEAVY METALS; *LITERATURE REVIEWS; *MODELING; *NUTRIENTS; *ORGANIC COMPOUNDS; *RESEARCH REPORTS; *SAMPLING; *SEDIMENTS; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 780-87P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9374). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO AQUATIC SEDIMENTS. TOPICS ADDRESSED INCLUDE ANALYTICAL AND SAMPLING METHODS, HEAVY METALS, BIOLOGICAL ACTIVITY, ORGANICS, MODELING AND SEDIMENT TRANSPORT, AND NUTRIENTS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011268

PUBLICATION DATE: JUN 84

TITLE: SUBSTRATE ASSOCIATED MICROFAUNA.

PERSONAL AUTHOR: LAZORCHAK, JAMES M.; BURTON, G. ALLEN, JR.

DESCRIPTOR: *ECOLOGY; *ECOLOGICAL FACTORS; *LITERATURE REVIEWS; *MICROFAUNA; *MICROBOLOGY; *RESEARCH REPORTS; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 787-91P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9378). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO SUBSTRATE ASSOCIATED MICROFAUNA. TOPICS ADDRESSED INCLUDE METHODOLOGY AND ECOLOGY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V65 N6

IRIS ACCESSION NUMBER: EW011269

PUBLICATION DATE: JUN 84

TITLE: HUMAN HEALTH EFFECTS ASSAYS.

PERSONAL AUTHOR: SIMS, RONALD C.; AND OTHERS

DESCRIPTOR: *BACTERIA; *ASSAYS; *CHEMICALS; *ENVIRONMENTAL EFFECTS; *HUMANS; *LITERATURE REVIEWS; *POLLUTIONS; *PUBLIC HEALTH; *RESEARCH; *SAMPLING; *RESEARCH REVIEWS; *TESTING

DESCRIPTIVE NOTE: 791-800P.

ABSTRACT: THIS ARTICLE REVIEWS RESEARCH ON HUMAN HEALTH EFFECTS OF POLLUTANTS. SECTIONS INCLUDE TEST SYSTEMS, ENVIRONMENTAL SAMPLES, CHEMICAL SUBSTANCES, AND BACTERIAL ASSAYS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

IRIS ACCESSION NUMBER: EW011270

PUBLICATION DATE: JUN 84

TITLE: DETECTION OF BACTERIAL PATHOGENS.

PERSONAL AUTHOR: WETZLER, THEODORE F.; ROY, DIPAK

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANIMALS; *BACTERIA; *CONTAMINATION; *LITERATURE REVIEWS; *MICROBIOLOGY; *PATHOGENS; *RESEARCH REPORTS; *WATER POLLUTION; *WATER QUALITY; *VIRUSES; *HEALTH EFFECTS

DESCRIPTIVE NOTE: 800-05P.

ABSTRACT: THIS ARTICLE IS AN UPDATE TO ONE THAT APPEARED IN THE 1983 LITERATURE REVIEW (EW 9382). A REVIEW OF THE LITERATURE IS PROVIDED FOR TOPICS RELATING TO BACTERIAL PATHOGENS AND VIRUSES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V56 N6

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*HISTORY (1) EW011030
*HUMAN RESOURCE DEVELOPMENT (1) EW011038
HUMAN RESOURCES DEVELOPMENT (1) EW011093

*HUMANS (1) EW011269

*HYDRANTS (1) EW010962

*HYDRAULIC ANALYSIS (1) EW011101

*HYDROCARBONS (3) EW011085 EW011225 EW011263

*HYDROLOGY (4) EW010951 EW011054 EW011055 EW011241

HYDROLOGY (1) EW010954

*IMPACT ASSESSMENT (1) EW010935

*IMPACT ASSESSMENTS (1) EW010977

*INCENTIVES (2) EW011091 EW011105

*INCINERATION (1) EW011235

*INCINERATORS (1) EW010874

*INDUSTRIAL MANAGEMENT (2) EW011046 EW011047

*INDUSTRIAL WASTES (34) EW010709 EW010824 EW010849 EW010851 EW010861 EW010865 EW010872
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EW011058 EW011076 EW011182 EW011212 EW011243 EW011244 EW011245 EW011246
EW011247 EW011248 EW011249 EW011250 EW011251 EW011252 EW011253 EW011254
EW011255 EW011256 EW011257

INDUSTRIAL WASTES (2) EW011230 EW011264

*INDUSTRY (17) EW010950 EW010989 EW011037 EW011043 EW011047 EW011099 EW011109
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EW011213 EW011239

*INFILTRATION (1) EW011100

*INFLOW (1) EW011100

*INFLUENTS (1) EW010919

*INFORMATION DISSEMINATION (1) EW010955

*INFORMATION SOURCES (1) EW011004

*INORGANIC ANIONS (1) EW011028

*INORGANIC CHEMICALS (3) EW010931 EW011164 EW011166

*INORGANIC COMPOUNDS (2) EW011224 EW011237

*INORGANIC CONTAMINANTS (1) EW010931

*INSPECTION (1) EW010965

*INSTRUCTION (5) EW010890 EW010985 EW010988 EW011038 EW011039

*INSTRUCTIONAL DESIGN (1) EW010986

*INSTRUCTIONAL DEVELOPMENT (1) EW010914

*INSTRUCTIONAL MATERIALS (20) EW010890 EW010922 EW010928 EW010931 EW010934 EW010935 EW010938
EW010953 EW010985 EW010986 EW011043 EW011067 EW011068 EW011085 EW011092

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| *INSTRUCTIONAL TELEVISION | (1) | EW010989 |
| *INSTRUMENTATION | (2) | EW011227 EW011238 |
| INSTRUMENTATION | (1) | EW011230 |
| *INTERNATIONAL COOPERATION | (1) | EW010949 |
| *INTERNATIONAL PROBLEMS | (1) | EW010949 |
| *INVERTEBRATES | (2) | EW011264 EW011266 |
| *ION CHROMATOGRAPHY | (1) | EW011028 |
| ION EXCHANGE | (1) | EW011229 |
| *ION EXCHANGE RESINS | (1) | EW010993 |
| IONS | (1) | EW011059 |
| *ION-SELECTIVE ELECTRODES | (1) | EW011171 |
| *IRON | (1) | EW010958 |
| *IRON INDUSTRY | (1) | EW011182 |
| *IRRIGATION | (5) | EW010923 EW010984 EW011076 EW011113 EW011147 |
| IRRIGATION | (1) | EW011239 |
| *ISSUES | (2) | EW010951 EW011162 |
| *JORDAN | (1) | EW011130 |
| *LABORATORIES | (1) | EW011002 |
| *LABORATORY EQUIPMENT | (2) | EW010964 EW011171 |
| *LABORATORY MANUALS | (1) | EW011217 |
| *LABORATORY PROCEDURES | (19) | EW010851 EW010922 EW010976 EW010992 EW010994 EW011000 EW011029 EW011074 EW011075 EW011081 EW011085 EW011092 EW011121 EW011164 EW011165 EW011168 EW011171 EW011217 EW011224 |
| *LABORATORY SAFETY | (1) | EW011114 |
| *LABORATORY SYSTEMS | (1) | EW011002 |
| *LABORATORY TESTS | (1) | EW010994 |
| *LAGOONS | (2) | EW011148 EW011232 |
| LAKE ICE | (1) | EW010954 |
| *LAKES | (8) | EW010937 EW010938 EW010954 EW011017 EW011018 EW011052 EW011259 EW011260 |
| *LAND APPLICATION | (6) | EW010970 EW011069 EW011076 EW011240 EW011242 EW011246 |
| *LANDFILLS | (1) | EW011086 |

*LAND TREATMENT (1) EW010872
*LAND USE (5) EW010949 EW010995 EW011000 EW011162 EW011216
*LATIN AMERICA (1) EW011128
*LEACHATE (2) EW011000 EW011086
*LEACHATE DAMAGE (1) EW011000
*LEAD (1) EW011115
LEAD (1) EW010935
*LEAKAGE (1) EW010965
*LEAKS (1) EW011025
LEARNING MODULES (1) EW010748
*LEGAL ACTION (1) EW011062
*LEGAL ASPECTS (1) EW011223
*LEGAL IMPLICATIONS (1) EW011216
*LEGISLATION (4) EW011046 EW011047 EW011069 EW011223
*LIFT STATIONS (1) EW010967
*LIME (1) EW011036
*LIMNOLOGY (1) EW010938
*LINER FAILURES (1) EW011025
*LINERS (1) EW011025
*LIQUID CHROMATOGRAPHY (1) EW011092
*LITERATURE REVIEWS (50) EW010872 EW011025 EW011066 EW011221 EW011222 EW011223 EW011224 EW011225 EW011226 EW011228 EW011229 EW011230 EW011231 EW011232 EW011233 EW011234 EW011235 EW011236 EW011237 EW011238 EW011239 EW011240 EW011241 EW011242 EW011243 EW011244 EW011245 EW011246 EW011247 EW011248 EW011249 EW011250 EW011251 EW011252 EW011254 EW011255 EW011256 EW011257 EW011258 EW011259 EW011260 EW011261 EW011263 EW011264 EW011265 EW011266 EW011267 EW011268 EW011269 EW011270
*LITERAUTRE REVIEWS (1) EW011262
*LITIGATION (1) EW011062
*LOCAL GOVERNMENT (1) EW010950
*MACROINVERTEBRATES (1) EW011266
*MAINS (1) EW010965
*MAINTENANCE (15) EW010919 EW010920 EW010921 EW010963 EW010974 EW010975 EW010984 EW011045 EW011071 EW011096 EW011100 EW011181 EW011182 EW011228 EW011238
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MANAGEMENT (1) EW011046
*MANAGEMENT BY OBJECTIVES (1) EW011079
*MANGANESE (1) EW010958
*MANUALS (2) EW010848 EW011020
*MANUFACTURERS (19) EW010956 EW010957 EW010958 EW010959 EW010960 EW010961 EW010962 EW010963 EW010964 EW010966 EW010967 EW010968 EW010969 EW010970 EW010971 EW010972 EW010973 EW010974 EW010975
*MANUFACTURING (1) EW010965
*MARINE ENVIRONMENT (1) EW011048
*MARINE ENVIRONMENTS (1) EW011265
*MARINE SANITATION DEVICE (1) EW011048
*MARINE SANITATION DEVICES (1) EW011049
*MASSACHUSETTS (1) EW010989
*MASS SPECTROMETRY (1) EW010865
*MASS TRANSFER (1) EW011032
*MATERIAL DEVELOPMENT (1) EW010748
*MATHEMATICAL CALCULATIONS (1) EW011068
*MATHEMATICAL FORMULAS (1) EW011095
*MATHEMATICS (1) EW011068
*MEASUREMENT (4) EW010928 EW010973 EW011024 EW011032
*MEAT (1) EW011243
*MEETINGS (1) EW010988
*MEMBRANE PROCESSES (1) EW011042
MEMBRANE PROCESSES (1) EW011229
*MEMBRANES (1) EW011042
*MENTAL IMAGERY (1) EW011038
*MERCURY (1) EW011075
MERCURY (1) EW010935
*METAL (1) EW010937
*METAL RECOVERY (1) EW011075
*METALS (8) EW010934 EW011022 EW011056 EW011072 EW011075 EW011146 EW011217 EW011224

METALS (1) EW011059

*METERS (2) EW010964 EW011104

*METHODS (1) EW010997

*MICROBIOLOGY (4) EW011170 EW011237 EW011265 EW011270

MICROBIOLOGY (2) EW011233 EW011234

*MICROCOMUTERS (1) EW011081

*MICROFAUNA (1) EW011268

*MINIMUM COMPETENCIES (1) EW010740

*MINING (2) EW011161 EW011250

*MODELING (6) EW011179 EW011238 EW011258 EW011260 EW011261 EW011267

MODELING (3) EW010954 EW011221 EW011230

*MODELS (20) EW010936 EW010938 EW010939 EW010995 EW010996 EW011019 EW011020 EW011032 EW011034 EW011043 EW011050 EW011054 EW011055 EW011057 EW011072 EW011095 EW011101 EW011109 EW011179 EW011215

MODELS (1) EW011232

*MONITORING (20) EW010935 EW010952 EW010964 EW010979 EW011000 EW011012 EW011024 EW011025 EW011071 EW011082 EW011100 EW011120 EW011134 EW011140 EW011155 EW011221 EW011227 EW011256 EW011258 EW011261

*MOTORS (1) EW010961

*MUNICIPALITIES (3) EW011043 EW011099 EW011109

*MUNICIPAL WASTES (3) EW011015 EW011053 EW011076

*MUNICIPAL WATER SYSTEMS (1) EW011010

*NATIONAL ISSUES (1) EW010951

*NATURAL RESOURCES (5) EW010925 EW010949 EW010951 EW011014 EW011162

NATURAL RESOURCES (1) EW010954

*NATURAL WATERS (1) EW010935

*NEEDS ASSESSMENT (1) EW010985

*NETWORK ANALYSIS (1) EW011101

*NETWORKS (1) EW010912

*NEW MEXICO (1) EW011004

*NEW YORK (1) EW011150

NICKEL (1) EW010935

*NITRATES (1) EW011028

*NITRITES (1) EW011028
*NITROGEN (1) EW011017
NITROGEN (1) EW011230
NOAA (1) EW010997
*NONCARCINOGENS (1) EW011116
*NONFERROUS METALS (1) EW011146
*NONPOINT POLLUTION (1) EW011222
*NONPOINT SOURCE POLLUTION (3) EW010995 EW010996 EW011258
NUCLEAR POWER (2) EW011252 EW011256
*NUCLEAR RADIATION (1) EW011119
*NUMERICAL TECHNIQUES (1) EW010936
NUTRIENT CYCLING (1) EW010954
*NUTRIENT LOADING (2) EW011017 EW011260
*NUTRIENT REMOVAL (1) EW011018
*NUTRIENTS (3) EW011018 EW011059 EW011267
*OCCUPATIONAL HEALTH (1) EW011117
OCCUPATIONAL SAFETY AND HEALTH (1) EW010748
*OCEANOGRAPHY (1) EW010938
*OCEANS (5) EW010937 EW010938 EW010949 EW011053 EW011265
*ODOR CONTROL (2) EW010972 EW011247
*ODOR POLLUTION (1) EW011021
*ODORS (3) EW010959 EW010972 EW011021
*OIL (1) EW011138
*OIL DRILLING (1) EW011265
*OIL SPILLS (5) EW011118 EW011119 EW011138 EW011139 EW011265
*OKLAHOMA (1) EW011023
*OMAN (1) EW010984
*ONLINE DATABASES (1) EW010955
*ONLINE OPERATIONS (1) EW011024
*ONSITE DISPOSAL (1) EW011236
*ONSITE TREATMENT (2) EW011181 EW011236
*ONSITE WASTEWATER DESPOSAL (1) EW011001

*OPERATION CONTROL (1) EW010973
*OPERATIONS (WASTEWATER) (53) EW010709 EW010824 EW010917 EW010966 EW010967 EW010968 EW010969
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*OPERATIONS (WATER) (38) EW010918 EW010919 EW010920 EW010921 EW010922 EW010931 EW010952
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EW011143 EW011144 EW011145 EW011150 EW011214 EW011221 EW011237

*OPERATOR TRAINING (1) EW011003

*ORGANIC CHEMICALS (2) EW010872 EW011166

*ORGANIC CHEMISTRY (1) EW011092

*ORGANIC COMPOUNDS (19) EW010851 EW0108[illegible]1 EW010919 EW010952 EW010976 EW011063 EW011064
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EW011225 EW011237 EW011263 EW011267

*ORGANIC WASTES (1) EW011266

*ORGANOLEAD COMPOUNDS (1) EW011115

*ORTHO-PHOSPHATES (1) EW011028

*OUTFLOW (1) EW011095

*OXIDATION PONDS (3) EW010969 EW011148 EW011232

OXIDATIVE PROCESSES (1) EW011229

*OXYGEN (2) EW010990 EW011032

*OXYGEN TRANSFER DEVICES (1) EW010990

OXYGEN UPTAKE (1) EW011230

*OZONE (2) EW010992 EW011016

*PACKAGE PLANTS (1) EW010956

*PAPER INDUSTRY (4) EW011056 EW011134 EW011149 EW011249

PARTICLE DYNAMICS (1) EW010954

*PATHOGENS (2) EW011170 EW011270

*PEER PRESSURE (1) EW011105

*PERFORMANCE EVALUATION (30) EW010709 EW010824 EW010865 EW010874 EW010917 EW010918 EW010919
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EW011025 EW011027 EW011031 EW011035 EW011036 EW011037 EW011049 EW011063
EW011066 EW011072 EW011086 EW011152 EW011154 EW011182 EW011232

PERFORMANCE EVALUATION (1) EW011234
*PERSONNEL (1) EW011079
PERSONNEL (1) EW011093
*PESTICIDES (5) EW010709 EW011209 EW011210 EW011263 EW011265
PESTICIDES (1) EW011225
*PETROLEUM (1) EW011251
*PHARMACEUTICAL INDUSTRY (1) EW011213
*PHARMACEUTICALS (1) EW011213
*PHOSPHORUS (2) EW011017 EW011036
*PHYSICAL TREATMENT (1) EW011229
*PIPES (5) EW010960 EW010966 EW011010 EW011083 EW011151
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*PLANTS (1) EW011264
*POLICIES (5) EW010923 EW010949 EW010950 EW011091 EW011222
*POLICY (1) EW011180
*POLITICS (1) EW010950
*POLLUTANTS (2) EW011054 EW011165
*POLLUTION (14) EW010934 EW010939 EW010991 EW010997 EW011000 EW011009 EW011011 EW011012 EW011019 EW011047 EW011121 EW011137 EW011140 EW011263
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POLLUTION CONTROL (1) EW011161
*POLLUTION DAMAGE (1) EW011119
*POLLUTIONS (1) EW011269
*POLLUTION TRANSPORT (1) EW010939
*POLYCHLORINATED BIPHENYLS (1) EW011051
*POLYNUCLEAR AROMATIC HYDROCARBONS (1) EW010851
*PONDS (1) EW011018
*POROUS MEDIA (1) EW010939
*POSTSECONDARY EDUCATION (12) EW010922 EW010931 EW010953 EW011043 EW011067 EW011068 EW011085 EW011164 EW011166 EW011168 EW011171 EW011217

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| POSTSECONDARY EDUCATION | (2) | EW010748 EW011084 |
| *POULTRY | (1) | EW011243 |
| *POWER INDUSTRY | (1) | EW011252 |
| *POWER PRODUCTION | (1) | EW011252 |
| *POWER SUPPLIES | (1) | EW010978 |
| *PRETREATMENT | (1) | EW011213 |
| *PREVENTIVE MAINTENANCE | (1) | EW011071 |
| *PRIMARY TREATMENT | (2) | EW010968 EW011154 |
| *PRIORITY POLLUTANTS | (2) | EW010851 EW010865 |
| *PRIVATIZATION | (1) | EW010923 |
| PROBLEM SOLVING | (1) | EW011038 |
| *PROCEDURES | (1) | EW010997 |
| *PROCESS CONTROL | (2) | EW011032 EW011033 |
| PROCESS CONTROL | (2) | EW011230 EW011232 |
| *PROCESS CONTROLS | (1) | EW011155 |
| PROCESS DESCRIPTIONS | (1) | EW011234 |
| *PROCESS EVALUATION | (1) | EW011155 |
| PRODUCTIVITY | (1) | EW010914 |
| *PROGRAM DESCRIPTIONS | (6) | EW010915 EW011071 EW011080 EW011128 EW011144 EW011179 |
| PROGRAM DESCRIPTIONS | (1) | EW010912 |
| *PROGRAM DEVELOPMENT | (3) | EW010748 EW010912 EW010913 |
| *PROGRAMMING | (1) | EW010986 |
| *PROGRAM PLAYBACKS | (1) | EW010987 |
| *PROJECT DESCRIPTIONS | (1) | EW011130 |
| *PROPERTY RIGHTS | (1) | EW010923 |
| *PROTOCOLS | (1) | EW010997 |
| *PUBLIC ATTITUDES | (1) | EW011069 |
| *PUBLIC HEALTH | (13) | EW010934 EW010951 EW010980 EW010983 EW010991 EW011094 EW011115 EW011117 EW011118 EW011121 EW011143 EW011242 EW011269 |
| PUBLIC HEALTH | (1) | EW011084 |
| *PUBLIC PARTICIPATION | (1) | EW010950 |
| *PUBLIC POLICY | (1) | EW011222 |

*PUBLIC WORKS (1) EW011030
*PULP INDUSTRY (2) EW011037 EW011249
*PUMPS (3) EW010961 EW010967 EW010983
*PURCHASING (1) EW010985
*QUALITY CONTROL (2) EW010975 EW011168
*RADIATION (1) EW011114
RADIOACTIVE MATERIALS (1) EW011256
*RADIOACTIVE WASTES (1) EW011256
RADIOACTIVITY (1) EW011226
*RAINWATER (1) EW010981
*REAERATION (1) EW011261
*RECLAIMED WATER (1) EW010917
*RECOMMENDATIONS (9) EW010861 EW010874 EW010977 EW010978 EW010984 EW010988 EW011024 EW011064 EW011145
*RECORDS (1) EW011081
*RECOVERY (2) EW010849 EW011022
*RECYCLING (5) EW010917 EW011009 EW011022 EW011132 EW011239

*REFERENCE MATERIALS (1) EW010994
*REFERENCES (1) EW011116
*REFERENCE VALUES (1) EW010994
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*REHABILITATION (2) EW011106 EW011228
*RENOVATIONS (1) EW011096
*REPORTING (1) EW011155
*REPORTS (1) EW011003
*RESEARCH (21) EW010937 EW010955 EW010993 EW011004 EW011011 EW011015 EW011046 EW011116 EW011121 EW011132 EW011139 EW011144 EW011145 EW011181 EW011209 EW011210 EW011211 EW011231 EW011262 EW011263 EW011269
RESEARCH (2) EW010954 EW011264
*RESEARCH PROGRAMS (1) EW010954
*RESEARCH REPORTS (49) EW010709 EW010865 EW011050 EW011051 EW011053 EW011055 EW011056 EW011059 EW011073 EW011086 EW011118 EW011134 EW011225 EW011226 EW011228

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| *RESEARCH REVIEWS | (5) | EW011258 EW011262 EW011263 EW011264 EW011269 |
| *RESERVOIRS | (7) | EW010963 EW010965 EW010999 EW011052 EW011096 EW011130 EW011261 |
| *RESIDUAL OZONE | (1) | EW010992 |
| *REUSE | (1) | EW010849 |
| *REVERSE OSMOSIS | (1) | EW011132 |
| *RISK ANALYSIS | (1) | EW010850 |
| RISK ASSESSMENT | (1) | EW011256 |
| *RISK MANAGEMENT | (1) | EW010850 |
| *RIVER BASINS | (1) | EW011215 |
| *RIVERS | (4) | EW010937 EW011018 EW011215 EW011239 |
| *ROBOTICS | (1) | EW010916 |
| *ROCKS | (1) | EW010928 |
| *ROTARY DRUM SCREENS | (1) | EW011154 |
| *ROTATING BIOLOGICAL CONTACTORS | (2) | EW011152 EW011153 |
| *RURAL AREAS | (3) | EW010983 EW010999 EW011128 |
| *SAFETY | (5) | EW010973 EW910974 EW011105 EW011114 EW011223 |
| *SAFETY PROGRAMS | (1) | EW011105 |
| *SALINE WATER | (1) | EW911067 |
| *SALINITY | (2) | EW011054 EW011147 |
| *SAMPLES | (1) | EW010994 |
| *SAMPLING | (11) | EW010975 EW010976 EW010979 EW011000 EW011064 EW011121 EW011224<br>EW011227 EW011266 EW011267 EW011269 |
| *SAMPLING DEVICES | (1) | EW010976 |
| *SAMPLING MECHANISMS | (1) | EW010976 |
| *SAND FILTRATION | (2) | EW011015 EW011057 |
| *SANITATION | (4) | EW011001 EW011030 EW011048 EW011236 |
| SANITATION | (1) | EW011084 |
| *SANITATION DEVICES | (1) | EW011049 |
| *SCALE | (1) | EW011082 |

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| *SCREENING | (1) | EW011154 |
| *SCREENING METHODS | (1) | EW010851 |
| *SCREENING TECHNIQUES | (1) | EW010872 |
| *SCREENS | (2) | EW010956 EW011154 |
| *SEAFOODS | (1) | EW011140 |
| *SEA WATER | (1) | EW011110 |
| *SEAWATER | (1) | EW011036 |
| *SECONDARY TREATMENT | (2) | EW010969 EW011153 |
| *SECURITY | (1) | EW010978 |
| *SEDIMENT | (2) | EW011059 EW011183 |
| *SEDIMENTATION | (1) | EW010956 |
| *SEDIMENTS | (3) | EW011051 EW011054 E[illegible]011267 |
| SEDIMENTS | (1) | EW011226 |
| *SENEGAL | (1) | EW010982 |
| *SEPARATION PROCESSES | (1) | EW010993 |
| *SEPTIC TANKS | (2) | EW011001 EW011236 |
| *SERVICE LATERALS | (1) | EW011100 |
| *SETTLING | (1) | EW011033 |
| *SEWAGE | (1) | EW011011 |
| SEWAGE | (1) | EW011170 |
| *SEWAGE SLUDGE | (1) | EW010874 |
| *SEWER CLEANERS | (1) | EW011045 |
| *SEWER PIPES | (1) | EW010966 |
| *SEWERS | (8) | EW010966 EW010974 EW011030 EW011045 EW011100 EW011142 EW011228 EW011241 |
| *SHELLFISH | (1) | EW011140 |
| *SHIPS | (1) | EW011049 |
| *SHORELINES | (1) | EW011139 |
| *SILVER | (1) | EW011075 |
| *SIMULATION | (2) | EW010936 EW011179 |
| *SIMULATION MODELS | (2) | EW010995 EW010996 |
| *SITE INVESTIGATIONS | (1) | EW010928 |
| *SITE STUDIES | (1) | EW011009 |

*SLUDGE (10) EW010874 EW010971 EW011031 EW011033 EW011034 EW011069 EW011230 EW011235 EW011232 EW011254
*SLUDGE DISPOSAL (1) EW010971
*SLUDGE INCINERATORS (1) EW010874
*SLUDGE STABILIZATION (1) EW011235
*SLUDGE TREATMENT (1) EW011235
*SLUDGE UTILIZATION (1) EW011235
SLURRY PROCESSES (1) EW011233
*SOCIAL CONSTRAINTS (1) EW011069
*SOFTENING (1) EW010958
*SOILS (4) EW010928 EW011051 EW011233 EW011236
SOLIDS SEPARATION (1) EW011229
*SOLID WASTES (3) EW011000 EW011135 EW011257
*SOLVENT EXTRACTION (1) EW010709
*SOUTH CAROLINA (1) EW011097
*SPACE (1) EW010949
*SPECTROPHOTOMETRY (1) EW011217
*STANDARDS (7) EW010990 EW010994 EW011002 EW011012 EW011146 EW011165 EW011213
*STATE ISSUES (1) EW010951
*STATE-OF-THE-ART REVIEWS (1) EW011221
*STATE PROGRAMS (1) EW011003
*STATE ROLE (3) EW010950 EW011003 EW011180
*STATISTICS (2) EW010977 EW010979
*STEEL INDUSTRY (2) EW011182 EW011253
*STEP-FEED (1) EW011033
*STORAGE (1) EW011256
STORAGE (1) EW011250
*STORM DRAINAGE (1) EW011095
*STORMWATER (3) EW011097 EW011098 EW011241
*STORMWATER RETENTION (1) EW011098
*STREAMS (1) EW011261
*SULFATES (1) EW011028
*SURFACE RUNOFF (3) EW011097 EW011098 EW011241

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|---|---|---|
| *SURFACE TREATMENT AGENTS | (1) | EW011139 |
| *SURFACE WATER | (3) | EW010936 EW011013 EW011014 |
| SURFACTANTS | (1) | EW011225 |
| *SURVEYS | (3) | EW010861 EW011010 EW011065 |
| *SUSPENDED SOLIDS | (2) | EW011033 EW011036 |
| SUSPENDED SOLIDS | (1) | EW011226 |
| *SWITCHES | (1) | EW010987 |
| *SYMPOSIA | (2) | EW011161 EW011162 |
| *SYNTHETIC FUELS | (1) | EW011251 |
| *SYSTEMS ANALYSIS | (1) | EW011221 |
| *TASTES | (2) | EW010959 EW011021 |
| *TEACHER CHARACTERISTICS | (1) | EW011039 |
| TEACHING METHODS | (1) | EW010914 |
| *TECHNOLOGICAL ADVANCEMENTS | (1) | EW011238 |
| *TECHNOLOGY | (18) | EW010849 EW010918 EW010919 EW010920 EW010953 EW010955 EW011049<br>EW011061 EW011063 EW011129 EW011152 EW011155 EW011181 EW011212 EW011213<br>EW011229 EW011236 EW011253 |
| TECHNOLOGY | (1) | EW011239 |
| *TELECOMMUNICATIONS | (2) | EW010912 EW010913 |
| TELECOMMUNICATIONS | (1) | EW010914 |
| *TELECONFERENCES | (1) | EW010988 |
| *TELECONFERENCING | (1) | EW010914 |
| *TELECOURSES | (2) | EW010913 EW010985 |
| *TELEVISED INSTRUCTION | (1) | EW010989 |
| *TELEVISION | (1) | EW010987 |
| TEMPERATURE | (1) | EW010954 |
| *TERTIARY TREATMENT | (1) | EW010970 |
| TEST CONSTRUCTION | (1) | EW010748 |
| *TESTING | (2) | EW010990 EW011269 |
| *TEST METHODS | (1) | EW011028 |
| *TEXAS | (1) | EW011080 |
| *TEXTILES | (1) | EW011248 |
| *THERMAL POLLUTION | (1) | EW011262 |

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|---|---|---|
| *TIME | (1) | EW010986 |
| *TOILET FACILITIES | (1) | EW011084 |
| *TOXICITY | (2) | EW011209 EW011210 |
| *TOXICOLOGY | (1) | EW010952 |
| TOXICOLOGY | (1) | EW010748 |
| *TOXIC SUBSTANCES | (10) | EW010934 EW010950 EW011020 EW011024 EW011114 EW011115 EW011121 EW011149 EW011209 EW011210 |
| TOXIC SUBSTANCES | (1) | EW010954 |
| *TRACE ANALYSIS | (1) | EW011092 |
| *TRACE METALS | (1) | EW011224 |
| *TRAINING | (9) | EW010922 EW010965 EW010975 EW010997 EW011003 EW011038 EW011039 EW011084 EW011182 |
| TRAINING | (2) | EW010914 EW011093 |
| TRANSPORTATION | (2) | EW011250 EW011256 |
| *TRANSPORT PROCESSES | (1) | EW010936 |
| *TRANSPORT SYSTEMS | (1) | EW010938 |
| *TRENDS | (2) | EW011127 EW011137 |
| *TRICKLING FILTERS | (1) | EW011231 |
| *TRIHALOMETHANES | (2) | EW011133 EW011237 |
| *TROUBLESHOOTING | (1) | EW011182 |
| *TURNKEY SYSTEMS | (1) | EW011002 |
| *UNDERWATER OPERATIONS | (1) | EW010997 |
| *UNEP | (1) | EW010949 |
| *UNIVERSITIES | (1) | EW011004 |
| *URBAN AREAS | (1) | EW011241 |
| *USEPA | (3) | EW010994 EW011003 EW01114[illegible] |
| *USER MANUALS | (1) | EW010996 |
| *UTILITIES | (3) | EW011079 EW011080 EW011081 |
| *VALVES | (2) | EW010962 EW010967 |
| *VEGETABLES | (1) | EW011244 |
| *VERTEBRATES | (1) | EW011264 |
| *VIDEODISK RECORDINGS | (1) | EW010915 |
| *VIDEO EQUIPMENT | (1) | EW010914 |

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|---|---|---|
| *VIDEO INSTRUCTION | (1) | EW010985 |
| *VIDEOTAPE | (1) | EW010987 |
| *VIDEOTEX | (1) | EW010986 |
| *VIDEOTEXT | (1) | EW010890 |
| *VIRUSES | (3) | EW011056 EW011066 EW011270 |
| *VOLATILE CHEMICALS | (1) | EW011102 |
| *VOLATILE ORGANIC COMPOUNDS | (1) | EW011065 |
| *WASTE CONTROL | (2) | EW010998 EW011047 |
| *WASTE DISPOSAL | (30) | EW010849 EW010874 EW011000 EW011045 EW011048 EW011053 EW011069 EW011076 EW011084 EW011086 EW011097 EW011138 EW011161 EW011235 EW011242 EW011243 EW011244 EW011245 EW011246 EW011247 EW011248 EW011249 EW011250 EW011251 EW011253 EW011254 EW011255 EW011256 EW011257 EW011265 |
| *WASTE HEAT UTILIZATION | (1) | EW011252 |
| *WASTE IMPOUNDMENTS | (1) | EW011025 |
| *WASTE MANAGEMENT | (4) | EW010998 EW011249 EW011256 EW011257 |
| *WASTE RECOVERY | (2) | EW011245 EW011248 |
| *WASTERWATER TREATMENT | (2) | EW011045 EW011049 |
| *WASTE STREAMS | (1) | EW010872 |
| *WASTE TREATMENT | (9) | EW010709 EW010872 EW010993 EW011000 EW011022 EW011047 EW011247 EW011252 EW011257 |
| *WASTEWATER | (11) | EW010851 EW010955 EW011028 EW011069 EW011074 EW011165 EW011213 EW011217 EW011225 EW011227 EW011261 |
| *WASTEWATER ANALYSES | (1) | EW010994 |
| *WASTEWATER ANALYSIS | (1) | EW011165 |
| *WASTEWATER COLLECTION | (11) | EW010966 EW010967 EW010974 EW011045 EW011095 EW011097 EW011098 EW011100 EW011142 EW011228 EW011241 |
| *WASTEWATER RECOVERY | (1) | EW011245 |
| *WASTEWATER RECYCLING | (1) | EW011245 |
| *WASTEWATER REUSE | (1) | EW011245 |
| *WASTEWATER TREATMENT | (89) | EW010709 EW010824 EW010849 EW010865 EW010966 EW010967 EW010968 EW010969 EW010970 EW010971 EW010972 EW010973 EW010974 EW010975 EW011000 EW011001 EW011003 EW011012 EW011015 EW011016 EW011018 EW011021 EW011022 EW011027 EW011029 EW011030 EW011031 EW011032 EW011033 EW011034 EW011035 EW011036 EW011037 EW011042 EW011056 EW011057 EW011058 EW011061 EW011070 EW011071 EW011072 EW011073 EW011074 EW011075 EW011076 EW011079 EW011080 EW011086 EW011132 EW011134 EW011148 EW011152 EW011153 EW011154 EW011155 EW011170 EW011181 EW011182 EW011212 EW011213 EW011214 EW011222 EW011223 EW011229 EW011230 EW011231 EW011232 EW011233 EW011234 EW011235 EW011236 EW011237 EW011238 EW011239 EW011240 EW011242 EW011243 EW011244 EW011245 EW011246 EW011247 EW011248 EW011249 EW011250 EW011251 EW011252 EW011253 EW011254 EW011255 |

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 WASTEWATER TREATMENT                 (3)        EW011084  EW011221  EW011241
*WATER                                (7)        EW010928  EW010955  EW011021  EW011028  EW011065  EW011217  EW011225

 WATER                                (1)        EW010922

*WATER ANALYSES                       (1)        EW010994

*WATER ANALYSIS                       (2)        EW011164  EW011165

*WATER CHARACTERISTICS                (1)        EW011226

*WATER COLLECTION                     (1)        EW010925

*WATER DEMAND                         (2)        EW011104  EW011139

*WATER DEMANDS                        (1)        EW011043

*WATER DISTRIBUTION                   (14)       EW010960  EW010961  EW010962  EW010963  EW010980  EW010984  EW011010
                                      EW011082   EW011083  EW011094  EW011101  EW011127  EW011128  EW011130

 WATER DISTRIBUTION                   (1)        EW011084

*WATER MAINS                          (2)        EW010930  EW011083

*WATER METERS                         (2)        EW010964  EW011104

*WATER NEEDS                          (3)        EW011099  EW011101  EW011113

*WATER PIPES                          (1)        EW010960

*WATER POLLUTION                      (19)       EW010934  EW010935  EW011019  EW011119  EW011121  EW011134  EW011135
                                      EW011137   EW011140  EW011176  EW011258  EW011249  EW011260  EW011264  EW011265
                                      EW011266   EW011267  EW011268  EW011270

*WATER POLLUTION CONTROL              (21)       EW010939  EW010997  EW011000  EW011023  EW011025  EW011043  EW011052
                                      EW011054   EW011058  EW011061  EW011062  EW011120  EW011137  EW011138  EW011139
                                      EW011149   EW011161  EW011180  EW011183  EW011215  EW011262

 WATER POLLUTION CONTROL              (1)        EW011212

*WATER PROBLEMS                       (1)        EW010984

*WATER QUALITY                        (77)       EW010848  EW010918  EW010919  EW010920  EW010921  EW010922  EW010935
                                      EW010939   EW010951  EW010964  EW010980  EW010990  EW010991  EW010994  EW010995
                                      EW011010   EW011012  EW011013  EW011014  EW011017  EW011018  EW011019  EW011025
                                      EW011037   EW011050  EW011052  EW011054  EW011055  EW011059  EW011061  EW011062
                                      EW011064   EW011065  EW011075  EW011082  EW011094  EW011110  EW011120  EW011129
                                      EW011133   EW011134  EW011137  EW011147  EW011161  EW011162  EW011164  EW011165
                                      EW011179   EW011180  EW011183  EW011209  EW011210  EW011215  EW011217  EW011221
                                      EW011222   EW011223  EW011224  EW011225  EW011226  EW011227  EW011233  EW011237
                                      EW011239   EW011241  EW011257  EW011258  EW011259  EW011260  EW011261  EW011262
                                      EW011264   EW011265  EW011266  EW011267  EW011268  EW011270

 WATER QUALITY                        (2)        EW011132  EW011170

*WATER QUALITY CONTROL                (1)        EW010861

*WATER RATES                          (3)        EW010923  EW011062  EW011104

*WATER RECLAMATION                    (1)        EW011239

*WATER RESOURCES                      (35)       EW010921  EW010923  EW010925  EW010936  EW010951  EW010980  EW010981
                                      EW010982   EW010984  EW010991  EW010999  EW011004  EW011009  EW011013  EW011014
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|---|---|---|
| | | EW011023 EW011043 EW011054 EW011055 EW011061 EW011062 EW011064 EW011065 EW011096 EW011102 EW011109 EW011110 EW011127 EW011161 EW011179 EW011215 EW011216 EW011221 EW011222 EW011239 |
| WATER RESOURCES | (2) | EW010917 EW010954 |
| *WATER REUSE | (4) | EW011009 EW011058 EW011132 EW011239 |
| *WATER RIGHTS | (1) | EW010923 |
| *WATERSHEDS | (3) | EW010995 EW010996 EW011258 |
| *WATER STORAGE | (1) | EW010963 |
| *WATER SUPPLY | (34) | EW010923 EW010925 EW010931 EW010951 EW010961 EW010962 EW010963 EW010980 EW010981 EW010982 EW010983 EW010984 EW010999 EW011010 EW011014 EW011023 EW011043 EW011065 EW011083 EW011094 EW011096 EW011099 EW011101 EW011102 EW011104 EW011109 EW011110 EW011127 EW011128 EW011130 EW011150 EW011161 EW011162 EW011215 |
| WATER SUPPLY | (2) | EW010917 EW011084 |
| *WATER TANKS | (1) | EW010963 |
| *WATER TREATMENT | (52) | EW010917 EW010918 EW010919 EW010920 EW010921 EW010922 EW010931 EW010937 EW010952 EW010953 EW010956 EW010957 EW010958 EW010959 EW010961 EW010963 EW010964 EW010965 EW010992 EW010993 EW011012 EW011016 EW011020 EW011021 EW011042 EW011057 EW011062 EW011063 EW011065 EW011066 EW011067 EW011068 EW011070 EW011080 EW011094 EW011099 EW011105 EW011110 EW011127 EW011128 EW011129 EW011130 EW011133 EW011143 EW011144 EW011145 EW011150 EW011170 EW011214 EW011223 EW011237 EW011239 |
| WATER TREATMENT | (2) | EW011084 EW011132 |
| *WATER USE | (2) | EW011101 EW011113 |
| *WATER UTILITIES | (1) | EW011150 |
| *WELLS | (2) | EW010982 EW010999 |
| *WETLANDS | (1) | EW011162 |
| *WILDLIFE HABITAT | (1) | EW011162 |
| *WISCONSIN | (1) | EW011079 |
| *WORLD PROBLEMS | (4) | EW010949 EW011118 EW011129 EW011130 |
| *WPCF | (1) | EW011070 |
| *YEMEN | (1) | EW010980 |
| ZINC | (1) | EW010935 |